

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

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Baltimore, March 15, 1890.

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Air Compressors.	Bridges.	Derricks.	Force Pumps.	Iron Working Machinery.	Punching and Shearing Mchry.	Steam Separator.
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[Continued on Page 69.]



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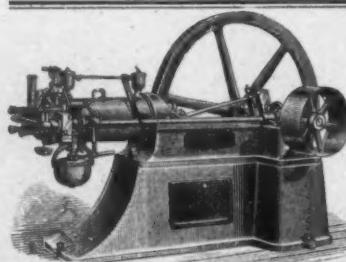
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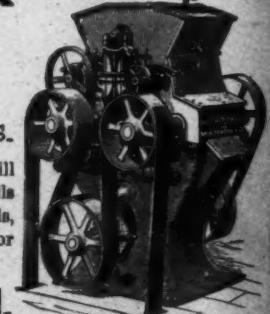
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BALTIMORE, MARCH 15, 1890.

Cotton-Seed Oil and Its Purity as a Food Product.

For human food olive and cotton-seed oils are far superior to lard, or to any other animal fat. Olive oil has held that rank in the estimation of scientists and medical men from the earliest period of recorded history. It is only of late years that analyses by chemists, experiments in diet by eminent physicians, and practical use by skillful housekeepers have combined to demonstrate that in every respect and for all uses the oil of the cotton-seed is equal to that of the olive. This fact once established, a market will be made for pure cotton-seed oil that will be co-extensive with that now occupied by olive oil. It will, indeed, become its competitor in all parts of the world. The MANUFACTURERS' RECORD, believing that the time has come when the South should make a vigorous move in behalf of cotton-seed oil, instead of simply acting on the defensive in the repeated assaults made in Congress on the purity of this oil, after an elaborate investigation, has accumulated a mass of information, and proposes to publish next week the first of a series of articles that will cover the whole subject. In these it will be shown beyond con-

troversy or shadow of doubt that cotton-seed oil is the best salad oil in the world and that it should be put upon the market on its merits, bearing its own name, and its excellence for all culinary purposes be persistently set forth until it receives popular approval and enters into as universal consumption as butter or lard. These articles, which will run through several months, will prove of immense value to the whole South by greatly widening the market for cotton-seed oil.

Significant British Admission.

A significant admission was made in an editorial which appeared January 31st in the London Iron and Coal Trade Review. After quoting statistics of the iron industry in this country (which it copied from the report of the American Iron & Steel Association), and commenting upon the rapid development of all its branches, the Review admits that the American demand for British iron in all forms has steadily declined, so much so "that we are compelled to acknowledge that the importance of the United States as a market for the articles enumerated is rather exaggerated, though the fiction will doubtless survive for a little while longer. Nor is it in the least degree likely that the future will alter the situation in this respect; for it must be borne in mind that the Americans are not only greatly improving, but reducing the cost of their processes of manufacture, and that, although wages are still considerably lower here than in the United States this advantage, for the reason mentioned, is not so great as it may seem. We are, therefore, forced to conclude that, just as in the case of crude iron, steel and certain descriptions of manufactured iron, the United States will shortly be independent of us in other respects. That market—valuable as it undoubtedly was a few years since—is becoming of less importance to us

day by day. Protection, which, it was thought, would only impede the progress of the American iron industry, has proved to be the very 'rock of its salvation.' And much as we may regret the result for our own sake, the American people, it must be admitted, have shown a much keener appreciation of what was essential to their progress than our own *doctrinaires* would be willing to admit." (The italics are ours.—ED.)

Coming from the source it does, this is a remarkable acknowledgement. It would never have been made but for the stern logic of facts. A steady falling off of American orders, great improvements in economic methods at American mines and furnaces, and, finally, that protection which has not impeded the progress of development, but has proved its "rock of salvation," these are things too palpable to be ignored, and so the Review states them frankly and says virtually we might as well give up the American market and make ourselves wholly elsewhere. And consequently the Review closes with the following earnest exhortation: "Meanwhile, it behoves us to strengthen our position wherever we can, and to lose no opportunity of opening up fresh fields for our superabundant energy and enterprise."

Quality of Southern Iron.

The recent shipment of Sheffield iron to Pittsburgh by barges has stirred up the whole country as though it were the first shipment ever made of Southern iron to that city. The greatest importance of the event was that it was the first direct shipment by water, thus practically opening up a new way of reaching Pennsylvania at a low freight cost. To try to offset the full importance of this shipment as the forerunner of others, a number of Northern papers have claimed that Southern iron was not of such a quality as to insure a large demand for it in Pittsburgh and elsewhere. But this is very fully answered by a letter in the Pittsburgh Dispatch, giving the results of tests by the Ohio Falls

Iron Works, of New Albany, Ind., of the same brand of iron. From these it appears the New Albany works have just completed a contract with a firm in Missouri for bar iron to be used for the Kansas City, Fort Scott & Memphis Railroad, in which the iron was required to stand a tensile strength of 50,000 pounds to the square inch, and an elongation of 20 per cent. in a two-inch section. A number of samples from the bars as they were made were sent to Chicago to be tested, from time to time, and all stood the required test. In some cases the bars were reported as standing a tensile strength of over 56,000 pounds. One piece of iron eight inches wide and one inch thick of the iron for this order was sent to Pittsburgh, Pa., to be tested. The report of the test to the company here was; "Elastic limit, 30,410 pounds; tensile strength 51,650 pounds; elongation in two inches, 25 per cent.; reduction of area, 21.60 per cent.; fracture fibrous with five per cent. crystals." Commenting on this report the Cleveland Iron Trade Review says: "With the above results, little can be truthfully said against the quality of Southern iron, and if Southern iron-masters succeed in maintaining this high standard, they will, no doubt, find their area of operations rapidly extending."

THE Iron Age says that "it is safe to conclude that the consumption of rails will be heavier in 1890 than it was in 1889. It is not unreasonable to hope that it will reach 1,800,000 net tons. Some authorities in the trade estimate 2,000,000 tons. We are inclined, in view of all the circumstances, to regard the latter figure as high, although it is not impossible that it may be reached or may even be exceeded. With 1,800,000 tons in 1890 prices cannot decline much; with a consumption of 2,000,000 tons they must develop a rising tendency before long."

THE MANUFACTURERS' RECORD is doing a great work for the South.—Tribune of Rome, Ga.

Miserable Telegraphic Service

What can be done to improve the telegraphic service in the South is one of those conundrums no person can answer outside of those magnates of the Western Union, who exercise unlimited control of the wires that criss-cross each other on the several Southern circuits. It is high time for a change for the better.

At present the worst telegraphic service in the United States is in the country south of the Potomac and Ohio rivers. We say this feelingly, because the MANUFACTURERS' RECORD has suffered much and many times from the carelessness and negligence of the telegraph companies that control the transmission of news north of the Gulf of Mexico, and because our own experience is confirmatory of the almost daily complaints that come to us from others. It has become a fixed custom with many Southerners who once used the telegraph to send important messages in an expedited letter, because the probability of immediate delivery is greater by that mode of conveyance than by the wires.

There are two well founded causes of complaint. 1st, slowness of transmission and delivery. 2nd, a lack of secrecy at many Southern delivery offices.

The delays mentioned in complaint number one are due solely to parsimonious management. Outside of the larger Southern cities, the offices of the Western Union are at railroad stations, and the station master, or some clerk in his employ, is the telegrapher. The master and his clerk are railroad employees. Their first duty is to the company that pays them. They owe none to the general public. What they do for it is secondary. As a rule they are obliging young men, but very overworked.

They have, in addition to the ordinary duties of ticket-sellers and freight handlers, to attend to a multitude of railroad details that keep them on the alert for many long hours. Should they fail in attending to their railroad duties, they would be discharged as incompetent, and they know it. The telegraph business, except as a side issue, so far as the public service is concerned, is of no consequence to them. They must look out for their bread and butter, and who can blame them? But the service itself, because of these conditions, is all awry. Let us give an incident that is by no means unusual. A correspondent of a Baltimore merchant goes to a telegraph office at a railroad station (let us say in South Carolina), with a dispatch of the utmost importance. Upon its immediate transmission depend many hundred dollars. He finds no one in the office, but there are three trains on the main track and sidings, and every office employee is up to his eyes in business that requires all his attention. The station-master is found, and the emergency stated. He replies: "I will go to the office and

take your message, but I cannot tell how soon we can forward it, for the wires are loaded down with railroad business, and that has the right of way. But I will get this off at the earliest moment."

The above is not a fanciful sketch, but an actual reproduction of what has occurred at more than one railroad station. And who are the losers? Not the railroads; not the Western Union Telegraph Co. It is the business community that suffers. For this there is but one remedy. The business of telegraphing for the public must be divorced from the railroads. For their own safety, and for convenience of traffic, railroads must run their own lines; but all that are to be of public use must be outside of and independent of them. The two cannot be conjoined without injury to the one or the other. Such, at least, is the existing condition at the South.

And now for complaint number two. It is generally supposed that every telegraph operator and transcriber is sworn to secrecy; that every message that passes over the wires is private property, belonging only to the sender and the legitimate receiver, and that it is the duty of the office operator to see that the message is delivered into the hands of the person to whom it is sent or to some duly accredited representative of that person. As a matter of fact, that rule has little observance in the South. In many places messages are delivered, not in sealed envelopes, but on the usual blanks; and if the messenger boy cannot find the party of the first part, it is no uncommon thing for him to give the open message to some person, whom he infers, is that party's friend.

Nor is that the worst of this careless (that is a mild word) way of doing telegraph business. There is a free and easy style prevailing at many places which makes the telegraph offices leak holes through which run into the community the contents of private messages, and the publicity given to information that should have been given only to its owner has often defeated public justice, or has put a sudden end to important business negotiations. So serious a matter has this leakage of private dispatches become, that business men have been compelled, for their own protection, to devise systems of cyphers for telegraphic messages between themselves and their correspondents, to secure that secrecy of communication which formerly obtained, but which is no longer observed in many of the Southern telegraphic offices.

The MANUFACTURERS' RECORD has for many months refrained from criticising the telegraph service, hoping that as the evils were so evident the management would remove them. But they (the evils) grow worse and worse, and the time has come when further forbearance would be a crime to the South, and to all

industries and business enterprises connected therewith. The right of Congress to regulate interstate commerce is now generally conceded. The telegraphic system is the hand-maid of interstate commerce, and if it is true that Congress can constitutionally regulate the first, it can care for the other also. Some power emanating from the people must and will do it, for the need exists and is pressing.

The 1892 Celebration. Where?

The House of Representatives selected Chicago as the best location for the World's Fair, that was, by universal consent, the best form for a popular celebration of the discovery of America by Columbus four hundred years ago. Chicago, through its members of Congress, through its citizens' committee, and through the columns of its daily newspapers, had announced that the people of that city had raised all the money that would be needed, and that if what they had pledged was insufficient they would guarantee all the balance. The government (they declared) should not be asked to spend a single penny. The Emporium of the lakes and the Northwest, the center (geographically) of the United States, proposed to take this quadri-centennial celebration on its own broad shoulders, and to carry it to a successful result that would redound to the honor and glory of this great Republic. The people of this geographical hub were so proud of their position that they were willing to pay the cost of putting in the spokes, of closing on the felloes, and of firing the same into that splendid wheel which symbolizes our country. To these promises and these blandishments the House of Representatives succumbed. The die was cast. Chicago was the accepted city. All those who had favored other localities yielded, and pledged themselves to help forward this patriotic, this national enterprise. But now the situation is changed.

Chicago the proud has become Chicago the mendicant, and from the confessions of her own newspapers and officials it is but too apparent that her statements and promises were mythical, in fact they were nothing more than so many bold bluffs. Such, at least, seem to be the facts confessed by Chicago's accredited representatives.

What, then shall be done? It is the universal desire to have a grandly appropriate celebration. We, as a people, have virtually proclaimed to the world our intention, and the whole world with responsive interest, awaits our action. To none but United States citizens does it make any material difference what place shall be chosen, but it is of the utmost consequence that that choice shall be determinately settled at an early day, in order that preparations may begin and be carried forward to completion—not only by those officials to whom

the organization will be intrusted, but also by those citizens, corporations, municipalities and States, that will prepare exhibits for the grand exposition.

The South, as a whole, preferred Washington, with New York as its second and Chicago or St. Louis as a third choice. Chicago was taken. Now will that city keep its promises? Or will the great City of the Lakes continue to stand before the country as a suppliant for aid to keep its lofty promises? And what has Congress to say? These are questions that the little time between now and mid-summer 1892 render imperative. Either Chicago must at once redeem her promises or else must confess her inability to make them good. The first duty of Congress is to demand a conclusive answer, and if that is not forthcoming, then to recall the choice made and to give the location to either New York or to Washington. For every conceivable reason the MANUFACTURERS' RECORD would prefer Washington, with New York as the second choice.

The South's Fine Opportunity.

Of all the great gatherings to be held during the coming months none will equal in importance, so far as Southern interests are concerned, that of the American Institute of Mining Engineers that will assemble in New York next September. The annual meetings of this organization, composed of the most able, the most experienced and the most celebrated mining engineers of this country, have always been of great practical benefit; but the coming session will be far in advance of any former one, for it will be attended by many of the foremost Europeans of the same profession.

Prof. R. W. Raymond, secretary of the institute, has furnished to the New York Tribune an outline of the proposed programme. Invitations have been accepted by the British Iron and Steel Institute to meet in this country at the same time and in conjunction with the American organization. Between 200 and 300 members have arranged to attend, including the president, Sir James Kitson, and others of international fame. Among the latter are Sir Lowthian Bell, Lord Edward Cavendish, M. P., William Whitwell and many of the best known iron and steel manufacturers of Great Britain. Invitations have also been sent to corresponding societies in Germany and France and to individual metallurgists of reputation, including the professors of the various mining schools. It is probable that the foreign attendance will number 500.

The American societies of civil engineers and of mechanical engineers and many other organizations identified with the iron and steel trades will assist the institute in the reception of its foreign guests. Andrew Carnegie is the chairman of the

general committee, and Charles Kirchoff, editor of the Iron Age, is its secretary. With those two efficient gentlemen in charge there is absolute certainty that the entire arrangements will be perfect in scope and detail.

After the guests reach New York they will be the recipients of numerous courtesies, and then the engineers, American and European, will repair to Pittsburgh, where the meetings of the two institutes are to be held. These are expected to occupy six days, during which time many papers prepared by American engineers will be presented, in which will be set forth the characteristic resources of this country and Canada, and the state of the arts and sciences connected with our mining and metallurgy. After the meetings there will be various local excursions to examine coal mines, the natural gas and other industries, and these will be followed by excursions to Lake Superior and to Alabama. In addition to this general plan the bureau of the American society will assist all their guests, who so desire, to visit particular points for the purpose of gathering special information.

Such is the outline of what is proposed. It is a grand plan, and will result in great good to the mineral interests of the whole country. But if the South is to be benefitted arrangements should be made to show these eminent guests not only the coal and iron districts of Alabama, but those of Kentucky, Tennessee, Virginia and the Carolinas also. Probably this can be effected if measures are promptly taken by the officials and citizens of the Southern States east of the Alleghanies, to organize committees empowered to communicate with Messrs. Carnegie and Kirchoff, and to complete all necessary arrangements. It is certainly worth trying for, and, if accomplished, its results will be of incalculable value to all these States.

AMONG the many palace-car parties that have visited the South this season was one in which Mr. W. J. Arkell, senior proprietor of Judge and of Frank Leslie's illustrated newspaper, with several staff artists and friends, were in the majority. On the return trip this party stopped in Charleston for a few hours, and while there Mr. B. Gillam, the noted cartoonist, was interviewed by a News and Courier representative. The artist said they had learned many things during the journey, and that when they reached home they would have to tell a new story of the progress of the South and advise capitalists to make it their field of operations. For more than a year Frank Leslie's management has been intending to send a corps of artists to the South; and now that Mr. Arkell and his party have seen by personal observation something of its beauties and of its grand opportunities, we presume that the long-deferred plan will be carried into effect.

An Important Move by the Farming Interests.

An interesting discussion has begun, based upon the bill introduced by Hon. Z. B. Vance, of North Carolina, in the United States Senate on the 24th of February. This bill provides for the establishment of government warehouses in every county of the United States upon the petition of one hundred or more citizens of that county, providing they can prove that the average gross amount of cotton, wheat, corn, oats and tobacco produced and sold in each of the two preceding years in that county has exceeded the value of \$500,000 at current prices. This bill, introduced "by request," is supposed to have emanated from the Farmers' Alliance, an organization of great numerical strength in the South and West, that is rapidly spreading in all the States and Territories. This measure is modeled upon the "Silver Bill," which has been in operation several years, and is the outgrowth of a forcible letter written by Col. Harry Skinner, of Greenville, North Carolina, (which was published early last year in the Progressive Farmer, a Raleigh agricultural paper,) who repeated his arguments in more concise terms in Frank Leslie's Illustrated Newspaper, over his own signature, last November. Col. Skinner, however, only asked that this system should apply to cotton, and he gave as a reason for its adoption the fact that while the Southern States held virtually a monopoly of the production of that important staple, yet its price in the markets of the world was determined annually (long before the season's crop was planted) by European speculators and consumers. As the national constitution positively forbade the levying of duties on exports, and as protection was the national policy, Col. Skinner argued that the only way in which cotton growers could get the real value of their crops was to have the government intervene, and, through a warehouse system, fix a reasonable price upon this great staple of the South, and thus protect the farmers as fully as it does the manufacturer. What Col. Skinner wished to secure was governmental protection to the cotton planting industry equal to that given to silver miners and to whisky distillers.

The Alliance has adopted Col. Skinner's plan, but claims similar protection for the producers of tobacco, corn and wheat.

The Atlanta Constitution concisely states the proposition by saying: "The currency reform is the one upon which they most strenuously insist, and in it they seek by a bold stroke to solve the money problem in a manner that will make farm products as current as bullion. The scheme is simply that the government issue, in the crop season, a currency based on non-perishable farm products, advancing to the

farmers eighty per cent. of the crop's value for twelve months. With this vigorous measure they propose to re-arrange the whole financial system of the country, and in the tremendous task they demand the aid of those who ask their votes."

Putting it in other words, the farmers wish to establish a flexible currency that will relieve them from the exactions of merchants and middlemen, and also give them a reasonable chance to take advantage of any advances in prices that may occur between harvest and harvest.

The MANUFACTURERS' RECORD rejoices that this discussion has been started, for out of it can come only good results. We shall follow its progress with great interest, and make it the subject of comment from time to time as circumstances may warrant.

Our Exports.

Before us is a volume of 505 closely-printed pages, everyone filled with tabulated figures. It is entitled "Annual Statements, by Countries and by Customs Districts, of the Imports and Exports of the United States for the Year Ending June 30, 1889." This book is the latest of those annually compiled by the Chief of the Bureau of Statistics of the Treasury Department for the information of Congress and the country. It was issued from the Government Printing Office in Washington last January. So much for what this volume is and for the editing and publication of the same. That it carries with it the guarantee of the national government, that it is a true statement of the commerce of the United States, compiled from official records, is a matter of course. It is no more a romance than is a merchant's ledger or a shipper's bill of lading. Its figures represent solid facts of the true Gradgrind kind. No nonsense about these 505 pages of figures. They are records of pounds, tons and gallons, and of their corresponding values in dollars and cents; what other countries sent us; what we sold to them. All these are systematically recorded. We can see what all nations bought of us, and what they gave us in exchange. In fact, this volume, which few people see, and which a yet smaller number study, is one of the most interesting and one of the most suggestive of any that are issued annually from the public or the private printing establishments of our country. It ought to be on the desk or on the library table of every large merchant and manufacturer as a ready reference and business guide, for its contents properly studied are as full of suggestions as an egg is of meat. To our national law-makers it is an invaluable instructor, and it would be well for the country if every mother's son of them were compelled to study it as thoroughly as the officers of both parties to the conflict did Hardee's tactics between 1861 and 1865.

This volume treats of our exports and imports. The latter we will not consider, for the others are much more interesting subjects of thought and comment. They tell something of the surplus products of the United States that go into the world's markets in spite of "that horrible thing called protection," which is the bugbear of many honest but uninformed citizens. Some of them prove conclusively the falsity of the arguments adduced by those who would have the United States get as near to free trade with other countries as the necessary expenditures of the government will permit. And still others are suggestive of the enlargement of industries now existing to meet the needs and supply the demands of those abroad who desire to be our customers. Surely this is an interesting as well as a valuable publication. What a pity that it is not more generally consulted, and that a greater use is not made of its many columns of reliable information. From the teeming statistics of this volume we shall select a few that will illustrate the character and value of all, and then lay the book aside for handy reference.

The grand total of the imports of the United States for the fiscal year ending June 30, 1889, exclusive of coin and bullion, amounted to \$745,131,652. Of this amount we re-shipped to foreign ports merchandise to the value of \$12,118,766. Our net importation of foreign merchandise therefore amounted to \$733,112,886. The grand total value of all our domestic products exported was \$730,282,609. The exchanges between our own and foreign countries came apparently to within about \$3,000,000 of being equal. But when it is remembered that but about ten per cent. of all this enormous incoming and outgoing tonnage was carried in American ships, and that ninety per cent. of it paid freights to foreign ship-owners, and that a very large share of our export trade paid profits and commissions to foreign middle men that, under a wiser system, would have inured to the profits of American producers, it will be clearly realized that by our false ideas of national economy, with reference to our marine interests, we lost last year more than \$300,000,000 that might have been retained in the United States.

An analysis of our exports of domestic products gives sundry startling facts. Of raw cotton we exported a total value of \$237,775,720, and of cotton goods \$10,212,644, a total of \$247,988,364. Ninety per cent. of the cost of freights and insurances on this amount went to foreigners when it ought to have been kept at home. Surely the South has a profound interest in having such a stimulus given to the American merchant marine, that at all its ports there shall be ship-yards whereto its abundant products of wood and iron shall be converted

into ships, on which its great staples shall be carried to the markets of the world.

Another series of items of our export trade that are of unusual interest to the South appear under the classification, "Iron and steel, and manufactures of same." Of iron ore, but eight tons, valued at \$32, were exported, but all the other things enumerated under that head were valued at \$21,156,077. So it seems that in spite of all those prophets of evil who can see no hope for an export trade of iron and steel products, we have actually found foreign customers who are glad to pay us more than twenty million dollars for such goods within a year. Judging from the shipments of various kinds made since June 30th, the report for the current fiscal year will show a very heavy increase in this class of exports. This business never amounted to much until iron-making got to be an important Southern industry. With its rise and progress foreign demands will increase until the South can beat Europe in the competition between its manufacturing nations for the world's trade in iron products. Northern manufacturers are demanding free raw materials, because they can no longer compete with the South in iron production, but the South has free raw materials in its mountains, and will vigorously object to any being landed from foreign ships at the seaboard.

Here are two comparatively small items, but they can be made considerably heavier. The sum total of fruits exported, green, dried, canned and preserved, (with exports of nuts, a small item,) was \$5,071,584. This business is also in its infancy and will admit of indefinite expansion. The value of the clover seed exported was \$3,110,583. The South can be the richest clover-producing section of the United States, and it is fast attaining that desirable prominence.

These are but a few of the many suggestive statistics of this Treasury report. They tell their own story in concise terms. They are better arguments for the continuance of the protective policy and for the restoration of the American merchant marine than long-winded speeches and elaborate essays. "Facts are stubborn things," says the proverb, and the only reply of theorists to them is: "So much the worse for the facts." But that kind of argument never avails with our American people.

Bessemer Pig Iron in England and the United States.

Discussing the cost of Bessemer pig iron making in England and the United States, the American Manufacturer, of Pittsburgh, says:

The remarkable situation in the English hematite or Bessemer pig iron market that we pointed out in an editorial last week seems to be even more notable than the figures then at hand justified us in stating. Our English exchanges of two weeks ago show that warrants were at least 19s. lower

than makers' prices. Probably never in the history of the English market has there been such a margin between makers' prices and the prices of warrants, warrants being 63s. and makers' prices 80 to 82s. This price for warrants is certainly 12s. to 15s. less than the actual cost of production, based on the ruling price of raw materials in England.

To produce a ton of pig iron in the west coast of England requires, say, 35 cwt. of ore and 22 cwt. of coke. West coast hematites are worth at the mine from 16 to 20s., and Spanish ore is quoted at 16s. 6d. at the port of entry. Taking the average cost at the furnace at 18s. a ton, and coke delivered at 35s. a ton, the cost of Bessemer pig iron at a Cumberland furnace would be about as follows:

Ore, 1½ tons at 18s.	31s. 6d.
Coke, 1 1-10 tons at 35s.	38s. 6d.
Lime.	3s. 6d.
Wages, incidentals, etc.	8s. 6d.

82s. od.

This would make the cost of a ton of pig iron in the west coast 82s., or, on the basis of 24.2 cents to the shilling, \$19.84 a ton.

Now, how does this compare with the cost of Bessemer pig iron in the United States at the present time? Taking as a basis present costs of ore and coke, which are those we have taken for England, and assuming that the cost per unit of iron to make a ton of ore is 12 cents, and that 94 units of iron and 1 1-10 tons of coke are required to make a ton of pig, we would have the following as the cost of a ton of pig iron at Pittsburgh at the present time:

Ore, 94 units at 12 cents.	\$11.28
Coke, 1 1-10 tons at \$2.95	3.24
Lime.	.60
Labor.	1.35
Relining.	1.25
Incidentals.	1.25

\$17.97

This makes the cost of a ton of Bessemer iron in Pittsburgh at the present time, without counting anything for interest, plant, etc., practically \$18, about \$1.87 less than the price in England.

Analyzing the different elements of cost, it will be seen that the cost of ore to a ton of pig in the United States is about 40 per cent. more than in England, while the cost of coke is only about one-third what it is at English furnaces; lime in the United States is less, while labor in the United States is considerably more than it is in England, while incidentals are less.

The cost of English ores and coke are abnormally high, and while they may be maintained for a short time, it is more than can be expected by even the most sanguine that they will long remain as they are. The action of the speculators in unloading their warrants at prices far below the present price of production, based on the present prices of raw material, indicates that they at least do not believe that the present rates can be permanently maintained. It is also stated that there have not been many orders placed recently for the construction of ships in Great Britain, ship plates being one of the articles into which these hematite irons enter most largely. If this statement is true it seems evident that there must be in the near future a decline even in the price of makers' irons in Great Britain.

The Manufacturer gives the cost of ore in Pittsburgh per ton of Bessemer iron produced as \$11.28. There are points in the South where Bessemer ore could be furnished to local furnaces at not over about one-third of these figures with a considerable margin of profit.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year, or six months for \$2.00.

AN IDEAL FURNACE SITE.

The Exploring Party Finds an Abundance of High-Grade Ore Cheaply Mined.

Bessemer Ores in Prospect.

Advantageous Conditions for Profitable Iron-Making.

HEADQUARTERS
MANUFACTURERS' RECORD'S
EXPLORING EXPEDITION,
JACKSONVILLE, CALHOUN CO., ALA.,
March 8, 1890.

In childhood's happy hours the schoolmaster used to observe, with what I took to be a manifestation of fiendish glee: "children we will now resume our studies." Our latest symposium left us here, about to begin in earnest the climbing and scratching, the pounding and shin-scraping exercises so dear to the heart of the geologist and prospector. In order to start off with that air of wisdom which is always calculated to impress the reader, it will do no harm to refer to Dr. Eugene Smith's description of the geological formation of this county (Calhoun,) in which he gives a general section of the rocks as follows:

7. Cincinnati group.
6. Chazy.
5. Quebec dolomite.
4. Quebec shales.
3. Calciferous sandstone.
2. Potsdam sandstones and shales.
1. Acadian slates and conglomerates.

Reference to a dry column like that will be acceptable to the initiated when we come to remark upon the singular presence of apparently stratified deposits of red fossiliferous ores, identical with those of the Clinton group of the Upper Silurian, in the same hills, in some instances, with the true, properly bedded hematite ores of the Potsdam period.

Our first considerable acquaintance with these Potsdams, happened after a hearty breakfast and an early start in the crisp, sweet air of a sunny morning in the mountain country. A brisk ride of five miles brought us to the base of a ridge, around the foot of which flowed a handsome creek, through a deep forest of tall oaks. Beyond the shores of this flashing, noisy water-course, and up the side of the mountain the deep green of the closely growing pine groves shown emerald bright in the sun. The majority of people, and the fair sex to a man would inevitably stop at such a place and demand the ayes and noes on the question of suspending business instanter and resolving the convention into a pic-nic. Whenever such a motion could be gotten to a vote it would be carried beyond the hope of veto. As we intended to lunch on the spot, we managed to resist the *dolce far niente* aspects of the case and to pay some attention to a more material attraction offered by the creek in question. The action of the torrent has worn a channel for the stream which on sides and bottom exposes a great deal of iron ore; on either side leaving the deposit in full sight for fifteen or twenty feet and on the creek bottom for an hundred' feet wide, in many places. Above on the mountain sides of this property, known as the Butler-Green ore banks, the iron ore outcrops in such a way as to give one the impression that there is a solid hill of iron, which indeed is not practically far out of the probabilities. The iron in this part of the field is a rich, black, vitreous appearing ore, presenting much the appearance of fusion, and the inhabitants of the country about appear to be thoroughly convinced that the great internal fires of the planet have been monkeying with their ore resources, sometime during the six thousand years that simple, unaffected orthodoxy allows us for the evolu-

tion of everything material and immaterial up to date. These Butler-Green ores are remarkably high in metallic iron, although doubtless a trifle higher in phosphorus than some of their neighbors. However that may be there appears to have been a pretty constant effort to get hold of the property, on the part of outside corporations and syndicates. Our own analyses of the Butler-Green ores are not yet ready, but we have one by Messrs. Rattle & Nye of Cleveland, Ohio, of a bed not far off and which we visited afterwards. This is the Turner bed, which I am inclined to think will not average as high in metallic iron as the Butler-Green. The analysis, nevertheless, shows that it is a very good article and not to be treated with disrespect.

Iron	50.00
Silica	9.260
Phosphorus	.45
Manganese	.460
Alumina	4.80
Lime	.440
Magnesia	1.010
Sulphur	.89
Titanic acid	.022
Volatile matters	.9250

Without much doubt the Butler-Green property alone offers a basis for furnace industries equal to the needs of more than one large concern for an indefinite time; yet it is but one of a long series of deposits extending in two, if not three distinct leads through the foot hills and mountains for miles to the North and Northeast, and other miles to the South and Southwest of Jacksonville. In the introductory paper I made allusion to the remarkable extent to which this whole Jacksonville district is watered. Probably no one will sooner note the absence of an adequate water supply than the fellow who is scrambling all day up and down steep hill sides, and over grievous boulders and sharp-cornered masses of mountain debris. But hereabouts it is quite impossible to commence to get thirsty. Crystal, sparkling springs, and babbling spring brooks are encountered half a dozen times in every quarter mile of travel in any direction. I fancy that this maze of water-courses must be fed by the overflow of subterranean lakes or, at least, large streams. They burst out from the rocks, or bubble up through sands at the edges of the valley, with such force as could only happen with a strong pressure behind them. The oldest inhabitant never saw them diminish, and, if there were a dozen years of local drought I do not believe it could make any difference. In short, I believe that there is not a competent engineer who will not decide, after two or three days' inspection, that there is enough good, pure water in visible supply to meet the wants of a large city, and an important industrial center.

Following the mountains southward toward the city, from the Butler-Green and Turner deposits, the iron ore leads are heavy and continuous. Moving in this direction, there is a visible change in the appearance of the ores. They grow gradually less black and lustrous and begin to take on the aspect of the yellow, ochre colored ores characteristic of the Walker ores, east of Jacksonville. These Walker beds are well known among the Southern iron masters. Some of the best charcoal car wheel iron ever made in the South was from ores taken from the locality. They have been rather extensively opened and a considerable aggregate in tons of ore shipped to the Tecumseh and other furnaces. Of late years the property has passed into hands determined to hold it for the purposes of local industry, and the shipments of ore stopped. If the analyses I have been able to find are to be relied upon, and I have no doubt on that score the ores of these Walker beds should form the basis of a Bessemer steel development. The MANUFACTURERS' RECORD analyses will settle this question, and if the solution happens to be favorable it will be a rather neat thing for our friends here; because the Walker lead extends for a mile or such a matter, and

perhaps more, and the two beds, which are well defined, are massive and have been exploited sufficiently to settle any reasonable doubt as to the extent of the deposits they contain. I had a long talk with a man who used to be the foreman of the work on these beds, and who, I know as an intelligent and competent witness as to anything in the line of practical iron mining. He assured me that at one of the beds where the work was started with a large open cut, and a tunnel run in, later, some distance below the floor of the cut, that a vertical section of the bed was thus exposed not less than fifty feet thick, and that the bed was rapidly widening and becoming still more massive as the work went downward. He said that the ore was so perfectly bedded and in place, and was so entirely free from extraneous matter, dirt, clay or any associated rocks, as to offer the appearance of perfect stratification, except that there was a general appearance of the operation of some crushing force, which had operated at right angles to the planes of stratification. The practical effect of these apparent conditions was that when a little ore was picked out from the bottom of the face, about all above it to the depth of the picking. This rendered mining very cheap, and I believe that to-day furnaces located on the ground here could be supplied with ore, and indeed all other raw material at lower cost than at any other point with which I am familiar. Two analyses of the Walker ores are subjoined, which give the determination of phosphorus so low as to be far within the Bessemer limit:

No. 1.	No. 2.
Iron.....	56.20
Silica.....	7.22
Sulphur.....	.018
Phosphorus.....	.039

If Nature has done as well as that for the Walker ore beds, she has been partial indeed; because all the other things needful to please the fastidious taste of the most exacting furnace man are right on the spot. Almost within chuting distance of one of the most important openings, there is the ideal place for a large furnace. A bold stream of water can be carried to any part of the works, on the hill or anywhere, since there is a heavy fall from the fountain back in the mountains. There is a natural furnace bank to which iron, limestone and charcoal, or coke, can come without encountering necessity for a lift, and the furnace could be built in front with a pretty park for site, delightful location for furnace village, and railway transportation at the door. It is a wonder that somebody has not long ago hopped on such an opening, while people have been paying high prices for sites, in places where they must be at a disadvantage as against the large iron corporations owning great stretches of their own ore and coal lands, and where labor is relatively high and competition severe for those who now have to buy everything that their rivals, who were pioneers, got for nothing or for a song. But, for some reason or other, this corner of the vineyard seems to have been kept in the background, and if its resources and particular advantages have been at all generally appreciated outside of the immediate neighborhood and the Anniston district, it is news to me. Anniston may be assumed to realize the importance of the locality or probably the Blue Mountain Mineral Railway would not be building here. It is time that this and other like industrial Edens of the South, which to this time have blushed unseen within hearing of various townsite booms, should have their day in court, in the forum of the MANUFACTURERS' RECORD, and of other commanding organizations friendly to and promotive of legitimate Southern progress and prosperity. The great outside world knows little yet of the mines of wealth in this section, only awaiting the magic wands of capital, skill and enterprise to become

transmitted into new Birminghams, Annistons and Chattanoogas to astonish and paralyze the sons of men.

Where this ideal furnace site is situated, and it is only typical of a number that could be selected, there is an ample supply of limestone. There is so much excellent limestone for fluxing purposes that it is hardly worth discussion at any particular place. There is enough for all the furnaces in the State anywhere around, and the books give it the highest character. The large deposit which extends East and West across the valley just below the town, is known as the Rowan bed, and has been extensively tested by iron interests. Repeated offers have been made for it, for operation by Anniston corporations. I am informed that the control has been and still is held in the interests of this locality. I have seen several analyses of the Rowan deposit, which give determinations of from 99 to 99.24 carbonate of lime. I regard them as entirely reliable. * * * Furnaces intended to run on charcoal need considerable and reliable areas of charcoal timber to feed on. Taking the furnace site near the Walker beds as an illustration, it is immediately backed by a pine region of virgin timber, from which a supply of charcoal should be assured for many years, within limits so convenient that arrangements for the ultimate future need not bother the investor nor the manager for a couple of decades. This will apply equally to any furnace site along these mountains. Leading people here express their desire to satisfy anyone who may be interested that the ample and practically endless supply of charcoal for iron purposes, at satisfactory cost can be assured to whoever shall look into the subject with business views. I should imagine that it would not be difficult to guarantee satisfaction on that or any other point connected with the advantages and opportunities offered by this district for manufacturing enterprises of many descriptions.

Something was written in the previous paper about the name of Jacksonville in connection with the confusion that so generally ends by identifying it with Jacksonville, Florida. There appears to be a general wish that the new industrial locality, where it is expected that furnaces, foundries, rolling mills, etc., will be established, shall be christened with some name calculated to bring this Jacksonville out of confusion with any other, by associating it with an industrial center so designated as to be easily remembered—the designation to be something identified with Southern tradition, progress and industry. The company owning the mineral, timber and city property outside of the corporate limits have decided to call their industrial territory and surroundings, Tredegar. It strikes me as a first-class selection. It reminds one of the old Richmond Tredegar Iron Works. It is a good Cornish name with a crisp ring to it like the anvil blow of a steel hammer. It is a name not likely to be forgotten and although Jacksonville will be the postoffice no doubt for some time to come, people will soon learn to remember that there is a Jacksonville in Alabama adjoining Tredegar, and so be careful not to send their remittances to Jacksonville, Florida, when intending to have them go to the Alabama article. * * These divergences are necessary to create in the mind of the peruser an appetite for more analyses, which "in the spirit of love" we will now proceed to produce.

South of Jacksonville, that is the side opposite to Tredegar, the iron mountains continue upon their southerly, slightly southwesterly course, in a calm and dignified manner, notwithstanding the heavy load of iron ore, divided into the usual number of beds, that they have to carry with them. Seven or eight miles below Jacksonville the Woodstock Iron Co. of Anniston has ore property, but north of

that as far as I could learn the ore resources are owned by or controlled mostly in the interests of the Jacksonville Mining & Manufacturing Co., which corporation is also the proprietor of the Tredegar property, ores, timber, manufacturing facilities, and so on. Like the country above this stretch below the town is every bit of it picturesque, and well adapted to any purpose of industry or agriculture. Springs and spring branches, everywhere abound. The land is undulating and although the pilgrim and the stranger would not at the first glance call it the richest sort of prairie loam soil, at the same time it evidently produces cotton that much more pretentious ground might envy, while cereals, root crops, small fruits and good big grist mills blossom and thrive like four of a kind. One of these big flouring mills was in full blossom as we rode under a flume which supplies its mighty wheel with aqueous motivity. The flume crosses the rode; it leaks. One leak the size of a double-barreled gun hit me neatly at the base of the brain and ran out merrily from the junction of my gaiters and shoes. But you really don't notice these trifles on account of the salubrity of the climate.

On the way toward these Southern ore beds the fancy gently turns to thoughts of limestone. Major Rowan's, Mr. Martin's and other fine beds are passed and examined. Major Rowan's deposit has been mentioned; the others I do not know the analyses of. They include probably excellent fluxing and certainly some fine compact, tough building stones. Superior sandstones, adapted to building purposes, are to be found in large formations hereabouts. I saw specimens which I broke out of an outcrop, and which looked so much like the brownstone fronts of Murray Hill that I expected to see the organ-grinder and monkey of that aristocratic environment coming around the corner. Thus little touches of nature bring tears to the eyes of the meanest man. These sandstones are close-grained; do not appear to suffer any disintegration by the action of the elements—as I judge from examining the outcrops. They are of smooth, even colors, generally brown-grey, and are all around tougher than the smoking-room tale of a commercial pilgrim. The grey variety, for example, could make a stone house in a handsomer manner than anything I know of, hardly excepting the finest Cape Ann granite. But to return to our analyses. The lay reader does not much care for detailed description of leads, trends, strikes and dips. The ore beds at present under consideration do these things just like their fellows on the Tredegar side and present evidences of great volume of deposits. We have two analyses of ores taken from the Landrum Bank, 5 miles southeast of Jacksonville, made by the able chemist of the Woodstock Iron Co. They are as follows:

No. 1.	No. 2.
Iron.....	56.88
Silica.....	7.23
Phosphorus.....	.098
Manganese.....	trace

Other analyses, which we shall have presently, may show even better results as to some of the lower beds; but however that may be the determinations above given are sufficient to indicate the excellent quality of the ores. General Forney has a bed of ore in this direction which we visited. I have not seen any full analysis, but have found references to some in correspondence shown me. According to that information they give 52 to 53 metallic iron, 8 to 9 silica and phosphorus (one example) .098.

Now to wind up this question of analyses I mean to give eleven little ones all in a bunch, after which nobody will feel starved for that sort of thing for a while. You will observe if you please that six examples out of the eleven appear to be Bessemer ore. The first five numerically are from this immediate district, the others being taken from adjoining counties.

	1	2	3	4	5	6
Metallic iron..	59.02	57.71	48.45	47.69	60.00	48.25
Phosphorus...trace	trace	0.04	0.02	0.05	0.05	
	7	8	9	10	11	
Metallic iron ..	54.28	58.59	57.99	55.20	56.19	
Phosphorus ..	0.13	0.09	0.06	0.16	0.05	

The first five are from the ore beds of the Woodstock Iron Co.'s, so reported in Berney's Handbook of Alabama. They were made by Prof. Mallet of the University of Virginia. The remainder were analyzed by Dr. Chandler of New York, Prof. Britton and Dr. Eugene Smith, State Geologist of Alabama. Such an aggregation of Bessemer indications justifies a suspension of hostilities. We will continue to view the prospect ore next week.

GOLDSMITH BERNARD WEST.

ATLANTA IN 1890.

How Much She Has Grown.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

ATLANTA, GA., March 5, 1889.

In one year this Chicago of the South has added 800 new industries. Every one of the enterprises represents an additional factor to her commerce for the future. Four additional banks have been organized, and her population has grown from 74,676 to nearly 90,000. Ten years ago she numbered 37,000 souls within her corporation, so she has gained over 50,000 in that length of time. 54.4 miles of Belgian block and between seven and eight miles of curbing and sidewalks have been put down in the past year.

Atlanta grows and swells every day, and her property increases in an astonishing ratio. Gilt-edge property is held and valued to such an extent by its owners that but little central property can be bought at any price, and occasionally when a piece is thrown on the market the prices run up to incredible amounts. One piece of ground was offered at \$8,000 just one year ago, and recently was sold at private sale and brought \$30,000. The architects say there has never been a lull in building this winter, and drive in what direction you will the sound of the hammer and evidences of building meet your eye.

A large number of taxpayers has been added to her list. Thousands who rented homes a few years ago pay taxes now, and the building of homes is the best index to the growth of the city and the strongest assurance that she is there to stay.

Her street railways are surprising and this year will make a finer exhibit for her than any previous year. Many miles of track are already under contract. \$60,000 will be spent by one company alone in building extensions to its track. The Union electric company proposes to construct new lines on Smith, Gate and Love streets to the East Tennessee shops, connecting with Whitehall; also one to Jones avenue, connecting at Marietta and to Poplar through Davis, Mitchell, Mangum and Chapell, to connect with Broad street line, West End and Nelson. An improvement is to be made between the Marietta and Decatur street lines, so that cars will run continuously from the Exposition Cotton Mills to the Fulton county spinning mills, a distance of about four miles for a nickel. There is the Ponce de Leon avenue line and the dummy line to the Confederate Home and Reynoldstown, and other lines that are now under consideration.

Peachtree is Atlanta's Fifth avenue, and its beautiful grounds and extensive and perfectly-kept lawns are an individual feature of beauty that few cities possess. It gets its name from a creek a few miles north of the city, and this creek was named from a large peach orchard on its banks. There are only five vacant lots on this long and beautiful street within the city limits. The homes and residences built here within the last twelve months are many of them as handsome, artistic and expensive as can be found anywhere.

One of the many enterprises that will bring people and money into Atlanta is the Brosius Motor Sewing Machine Co. They employ 500 hands, have a pay-roll of

\$5,000, and one year from now they expect to increase the hands to 2,000. This wonderful machine was invented by a Virginian, Mr. J. M. Brosius, and the machine is run by springs; no treadle nor handle is needed. A child of six years can do the winding for the machine for a family. The springs are wound by a long lever as often as required, and may be wound while the machine is sewing, making it unnecessary to stop until the seam is finished. Each winding makes about 2,500 stitches. Or the machinery may be kept running constantly by occasionally winding the spring a little whenever one hand can be spared for an instant. It will sew an ordinary thickness of cloth folded eight times. This company purchased last August a tract of three acres and now has completed and in use as fine a building or factory as one would care to see. The building and machinery cost \$75,000, every dollar paid. These machines will be shipped all over the world, and the stockholders have a plum.

An examination of the list of the largest taxpayers of Atlanta shows, for a young Southern city, a very remarkable degree of personal wealth in a considerable number of citizens, who all built up their own fortunes almost entirely since the war. Perhaps the wealthiest is Senator Brown, whose possessions are estimated at from \$2,000,000 to \$3,000,000. There are 313 parties who pay taxes on over \$25,000 worth of property. Besides Senator Brown, Moore, Marsh & Co. and the Capital City Bank run beyond a-half million. Half a dozen corporations go up to nearly half a million. The Kisers, L. P. Grant, W. D. Grant, Mr. Hugh Inman, several estates and other corporations and firms have over a quarter of a million. Mr. Sam Inman, Walker Inman, John Silvey, C. W. Hunnicutt, J. W. English and a host of others approximate a quarter of a million, and a large number of others come closely up to these figures.

A very striking and valuable feature of Atlanta citizenship which shows the taste in fine stock and the investment of large means in a creditable way is the fact that so many of her people have splendid Jersey stock farms, where some of the finest and most costly cattle in the world are here bred, and from whom immense quantities of the best milk and butter are furnished to this fortunate and enterprising city. It is estimated that there are fully 20 of these Jersey farms right around Atlanta, and hundreds upon hundreds of these dainty cattle supply their rich pabulum to the critical epicures here. Mr. Robert Winship has a beautiful farm with 52 thoroughbreds. Mr. M. C. Kiser, one of our great wholesale princes, has 40 head. An enterprising physician, Dr. J. F. Alexander, Mr. Andrew Stuart, the county tax collector; the palatial Kimball House, Mr. T. L. Johnson, with 80 fine cows; Mr. J. H. Porter, one of our bankers; Mr. J. H. Dickey, a railroader, and a host of others operate these costly stock farms and pour upon the city their creamy treasures.

Atlanta has had notable addition to her list of princely architectural constructions in the handsomest statehouse in the South, put up with more honest economy and yet with finer finish and magnificence than any capital in the Union. The limit of cost was a million dollars, but it would be difficult to conceive of a more picturesque and imposing structure, both inside and out, than this stately public building, made largely of Georgia marble, exquisitely appointed, with ever modern convenience, and gem of architectural taste and beauty as well as of lofty proportions. It stands a superb illustration of Atlanta's cosmopolitan finish.

Atlanta is remarkable for the beauty and modern character of her edifices and private residences. Taking the great cities of the Union, there is a remarkable uniformity in the outward appearance of the finer

dwellings. But Atlanta has been improved in all parts of the city in the last few years with a style of private residences diversified, yet all strikingly attractive and modern. Those who have built have sought to vary the outward aspect of their tasteful houses, and the consequence is that in every neighborhood elegant dwellings in different styles of proportion, form and finish, delight the aesthetic eye and charm with the varying multiplicity of appearance and effect. Electric car, horse car and dummy lines of transportation in every portion of the city, on handsomely and substantially paved streets, have stimulated the improvement of all sections of the metropolis with these handsome private edifices. One can go nowhere in this progressive and wonderful city without seeing these works of comfort, taste and wealth. And its future no one can estimate. Healthful, progressive and cultivated, favored by nature, elevated, commercially located with surpassing endowment of advantages, the Gate City between the great West and the ocean, supremely located in a railroad point of view, cosmopolitan to the bottom, with a citizenship garnered from the world, permeated by the best element of the South, a citizenship unsectarian and sectional, and with a spirit of enterprising city devotion and pride that has no limit, Atlanta stands the coming city of the great expansive South, the type and the epitome of our bounding Southland, and the finest exponent of Southern energy and genius.

E. B. AVERY.

New Enterprises for Laredo.

LAREDO, TEXAS, March 1, 1890.
Editor Manufacturers' Record:

Contract was signed yesterday by T. S. McCulloh, president of the Kankakee Woolen Mill Co., Kankakee, Ill., to remove to Laredo at once their knitting mill, woolen mill and wool scouring mill. These combined industries will employ at the start three hundred operatives. Mr. McCulloh, who visited Laredo about a month ago, was much surprised to find so much progress and improvement made in Laredo, even in that short space of time. He has thoroughly studied the natural advantages offered in various Texas cities to manufacturers, and says that Laredo is undoubtedly destined on account of its cheap coal, abundant raw material, pure water, splendid climate and commanding location to become the manufacturing center for Texas and Mexico. He is willing to back his judgment by locating here what will be the finest woolen and knitting mills in the Southwest.

The Laredo Tannery & Leather Goods Co., with a capital stock of \$100,000, has been organized and will commence work at once. Charter has been sent to Austin. Charter of the Laredo Loan & Trust Co. was received to-day from Austin. The capital stock is \$250,000.

The receipts of the following companies for the year 1889 over those of 1888 were as follows:

The Western Union Telegraph Co.... 97 per cent.
The Laredo Water Co..... 102 " "
Express companies..... 85 " "

THE LAREDO IMPROVEMENT CO.

Great Activity at Laredo.

[Special Dispatch to MANUFACTURERS' RECORD.]
LAREDO, TEXAS, March 8, 1890.

Laredo this week has broken the record. Papers have been signed and contracts let for the immediate erection of a woolen mill, a furniture factory and a tannery and shoe factory. These combined industries will amount to at least an influx of half a million dollars and will employ nearly 1,000 operatives in addition to the dozen other manufacturing industries already located here. Our cheap coal and abundant raw material is rapidly making Laredo the manufacturing center of Southwest Texas and Mexico.

SAN ANTONIO, TEXAS.

"THE GEM OF THE SOUTHWEST."

From a Mexican Village to a Beautiful, Busy City.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

SAN ANTONIO, TEXAS, March 1, 1890.

Ten years ago San Antonio was an old Spanish town of not more than 20,000 people, the majority of whom probably were Mexicans, living in *jacals* of the rudest kind, while her American and German inhabitants lived in unostentatious *adobe* houses and her merchants were content to do business in dark one-story buildings, the flat roofs of which were covered with dirt, upon which weeds and grass and even small mesquite brush were permitted to grow, while within, coatless and unshaven clerks lazily waited upon the customers, who called only in early morn or late afternoon. Her streets were narrow, unpaved and without sidewalks, except of the rudest kind on Commerce street, to which almost the entire business of the town was confined, while her citizens either forded the river at the shallow crossings or else crossed on narrow plank causeways built in pontoon style upon whiskey barrels, of which by the way there was a great abundance in those times.

But, presto, and all is changed! To-day San Antonio is a thriving, busy city of over 50,000 inhabitants; her *jacals* have given place to palatial residences; her *adobe* stores have been demolished and in their places fine stone and brick structures rear their lofty fronts, where her merchants display in most inviting and artistic style their goods and wares of every kind from every clime, while busy clerks, full-dressed and clean shaven, rival those of Broadway, New York, in their polite and eager attention to please and accommodate customers, who now come and go from "early morn to dewy eve." Her river is spanned by a dozen steel and iron bridges, while her streets and plazas are being rapidly paved with concrete and mesquite blocks; her sidewalks laid with the best material with every facility for the comfort and convenience, both of pedestrians and of those whose means or taste incline them to drive. And all this without any boom or apparent effort at progression as the natural and inevitable consequence of her location and surrounding, for her people have always discouraged booms and made no effort to attract foreign capital. One very naturally asks, how is this, when other towns, in the State and out of it, are making such heroic efforts to attract attention, build up trade and move on abreast with the rapid strides of the age. The answer is simple and easy. One has but to look at her location on the map of this great empire State of the South to see that she is and must ever be, the metropolis of the great Southwest, the whole country West and Southwest of the Colorado river being tributary to her, while she is on the shortest and most direct route for travel and commerce from the Pacific slope to the gulf coast and South Atlantic ports. Capitalists from the North and East are not slow in seeing and taking advantage of opportunities for investment of their surplus funds and, without an effort, as I before said, on the part of her citizens to attract attention or to secure investment, many of these shrewd, far-seeing capitalists of the North and East have of late invested largely in real estate and business enterprises, and have secured suburban additions upon the surrounding heights, which are being laid off and improved and built up with the finest and most artistic residences which modern architecture can suggest and the most abundant supply of the very best building material easy of access can facilitate.

Nor is San Antonio indebted alone to capital, brains and energy from abroad for the rapid, substantial, though unostentatious progress she has made. Her own sons, "native and to the manor born," have begun to improve their property, and everywhere all over the city fine storehouses, bank buildings and residences are going up for the accommodation of the great influx of strangers coming here for health or for business purposes, while in most, if not all the new enterprises, they have large interests and all vieing, one with the other, in efforts to increase the new and growing industries of the city. One of the finest bank buildings in the city is the work of one of her native sons, who is doing an extensive business in that line, while largely interested in other enterprises of moment. Another bank building, the pride of the city in that line, was erected by an old citizen who made all his money here, and though now deceased, his spirit still lives in a son, active in all private enterprises and energetic in all public-spirited undertakings. While still another, the very ideal of a banking house, was built by an old resident, now president of the bank and owner of the best and most complete system of water works in the entire South, that sends it water mains and pipes ramifying the whole city as arteries the human system. Two lines of street cars, the one an enterprise of Northern men, who some years ago made their homes with us, the other, inaugurated by native enterprise and capital, occupy all the principal streets of the city and afford accommodation to thousands of citizens living or having business along their respective lines. The third, a "rapid transit," has been chartered and in course of this year will afford transportation to persons living in the outskirts of the city and easy and rapid access to Riverside Park, the beautiful grounds of the International Fair Association just below the city, where are annually gathered together for exhibition the industrial products, mechanisms, ores and fine stock of this country and Mexico. Besides these several private lines of street-cars are in contemplation and construction to connect the various suburban residential additions with the center of the city.

A general spirit of enterprise seems to have pervaded the public mind and enthused the whole people, once so careless and indifferent to their surroundings and parsimonious to a degree almost niggardly in their votes of money for public improvements, and lately half a million of dollars has been voted for street improvements and the erection of a city hall, which is now in course of construction on one of the principal plazas of the city, and when completed will be the pride of our town and a lasting monument to the enterprise of the mayor and aldermen who planned and projected it.

Not the least of the attractions of the city from an aesthetic point of view is her beautiful river, which has its source at the foot of the range of hills about four miles north of the principal plaza in springs as clear as crystal that boil up like vast cauldrons and send their pure and sparkling waters in a deep and rapid current that winds through the city in a manner perplexing to strangers, who never know whether they are on "this side of the river or the other," so tortuous is its rapid course and so often must it be crossed in riding or walking even a short distance along the business thoroughfares or public boulevards. From the bridges that span this stream most picturesque views of rapid, gurgling, foaming cascades, rushing over obstructions natural and artificial, and of flower gardens that line its banks, where every variety of rose, shrub and flower send forth their perennial bloom and sweetness to glad the eye and delight the senses all through that season of the year in which the less favored denizens of Northern

climes are wrapped in ice and snow, while at other points stately willows with their long drooping branches kiss the limpid waters passing by, or grand old pecans rear their stately forms and stretch their long arms to embrace and intertwine with their fellows on the opposite bank, forming a most delightful arboreal arcade above the rolling waters where nymphs and fairies might sport and revel in infinite delight.

From the springs some little distance below the primal source of this river (but still a part of its supply) the water works derive their supply, thus giving to consumers pure and wholesome water as it gushes from clefts in the rocks of the "everlasting hills" that repose in solemn grandeur along the Northern confines of the city. The river also supplies the irrigating ditches or canals by means of which water is carried to vast tracts of land below the city devoted to the cultivation of garden vegetables, which are of the finest kind and raised in great abundance, supplying all the year round the tables of hotels and citizens with such fresh and succulent vegetables as in other localities are raised alone in spring time, and then only with much care and culture.

Another stream, the San Pedro, less bold and inviting, has its head waters in springs just one mile above the main plaza, and runs its course almost parallel with the river through the Western portion of the city, and empties its waters into the large stream within the Southern limits of the corporation, so that there is no lack of water supply for all needful purposes, and much of it could be spared for the running of factories of various kinds, and then an abundance be left for the city's needs.

As your readers have doubtless already gathered from this letter, San Antonio is situated in the valley of the river from which it derives its name, with a range of high hills, or rather an elevated plateau terminating in high hills on the North, extending in a semi-circle around the city from East to West, affording protection from the cold winds of the North, while the prevalent southeast breeze blows directly up the valley, making the evenings delightfully cool and pleasant, and tempering to moderation the fiercest rays of a midsummer sun.

So cool and refreshing is this summer southeast breeze that most persons prefer remaining here all summer rather than go north to shelter amid the stagnant atmosphere of fashionable resorts. And no one who has ever basked (as all must who come here) in the bright sunshine and soft, zephyr-like breezes of the winter months will ever willingly spend another winter North. In summer the rays of the sun are so tempered by the cooling breeze and the evaporation from the waters of the rapidly flowing rivers that the mercury never rises higher than 96 degrees, and in winter it scarcely ever falls below 32 degrees, and but rarely so low as that, and then even, for a few days only in an entire winter. The site of the city is at an elevation of about 800 feet above the sea level, and in a section of country entirely free from marshes or stagnant water, thus rendering it free from malarial diseases and a pleasant health resort even in summer. Among the many attractions of San Antonio as a place of residence, the city has the best system of public free schools in the State, or as to that, of any of the cities of the South, and I doubt much if a better system and more thorough instruction is afforded in many of the cities of the North, where public free schools have been fostered for so many years. The city fathers have had the advantage of the experience of others, and have profited by their mistakes and built up a system nearly approximating perfection, so that with a thorough scholar and trained teacher as superintendent, with a splendid corps of teachers and large commodious buildings, in every ward of the

city, erected with a view to convenience, comfort and health, no schools can show a larger average attendance, brighter and cheerier looking boys and girls or more thorough and accurate instruction than those of San Antonio. There are, besides private schools and academies of high grade of scholarship both for boys and girls, a Roman Catholic college and convent, all of which are well patronized by persons who prefer sending to private schools and others living beyond the city limits and in different parts of the State, and even in Mexico, from which latter great numbers of children are annually sent here to be educated in the English language and to learn the habits and customs of our people, or *los Americanos*, as they style us on this side the Rio Grande. Fine church edifices, with domes and spires reaching heavenward, places of worship, of almost every denomination of religious faith and almost every shade of belief, are conspicuous monuments of the city's progress not only in a commercial point of view, but in that intellectual refinement and high moral culture which comes alone of pure Christian grace, or is at least, its invariable accompaniment. The ringing of church bells on Sunday mornings, pealing out their calls to devotion, the deep notes of the church organs as they respond to the touch of skilled fingers and give forth strains of sacred music all remind one that San Antonio is no longer a frontier town where the war-whoop of the wild Comanche may resound to startle her denizens, but a modern city full of life and energy, with a community cultivated in the arts and sciences, elevated in intellectuality and refined in religious faith.

I have not written in detail of the vast water-power of the San Antonio river, the facilities and opportunities for the establishment of factories of various kinds, nor have I made particular reference to the amount of banking and other business of the city, preferring to secure details for future letters, and to give in this only a general outline of the progress of the city within the last decade, which marks the beginning of an epoch of great social, religious and industrial growth in her history. Mention just here, however, of a few of the new industries will not, perhaps, be amiss, as indicia pointing to what is still needed and yet to come. There are two flour mills here with patent roller process, which grind night and day, but cannot meet one-tenth of the demand, the greater part of the flour sold in this market being shipped here from St. Louis. There is also a steam cake and cracker factory and several small candy manufactures, worked to their utmost capacity and find ready sale at remunerative prices for all their products. A cotton-seed oil mill manufactures and refines the finest oil of that class, and ships vast quantities of the oil and cottonseed meal or cake to other localities. The gas works and two electric plants dispense their illuminating influences over the streets and in the stores, and give to night the sickly appearance of expiring day. There are already here three breweries of large capacity, making most excellent beer to those whose taste run in that line, but to me most execrable stuff, as is all the product of breweries that it has been my misfortune to taste. Bah! I can't even write lager without a sense of bitter taste that pervades my whole system, sending a shiver as of an ague chill all over me. Three ice factories distribute their cool crystalline bars throughout the city, and contribute all they can towards rendering the beer palatable to even such vitiated tastes as that of the writer, while they give a zest to other cooling and refreshing drinks.

But I should not neglect to mention among the attractions of the city the beautiful opera-house, a perfect gem of its kind, from the boards of which the finest com-

panies give forth artistic music to charm and delight the refined ear, while high tragedy often grimly walks its boards and mirthful comedy dispenses its pleasing jests to delighted audiences. Not the least among the attractions of this old town with new life is the Government Post, as it is called, or military headquarters of the army of the department of Texas. It is situated in the eastern suburb, on the range of hills before alluded to as looking down upon the city nestling below amid sweet arcadian groves, and is built up with excellent stone quarters tastefully and elegantly arranged, while the grounds are beautifully laid off with roads and walks as smooth as glass, and constantly open to citizens for recreation either on foot or horseback or in vehicles. Along this line or range of hills adjoining the Post is one of the suburban additions above referred to, while the whole stretch or semi-circle of hills has been laid off for residential purposes, and some of them supplied with artesian wells, which gurgle up their pure waters from a depth ranging from 200 to 350 feet.

So that for business adventure, for abundance of the most desirable sites for suburban residences, for healthfulness, for salubrity of climate, for beauty of scenery, for social, religious and educational advantages and the great desideratum, pure water, San Antonio has no superior and perhaps but few equals on this green earth of ours.

ELIAS EDMONDS.

Drawn to Virginia by Letters in the Manufacturers' Record.

BASIC CITY, VA., March 8, 1890.
Editor Manufacturers' Record:

Having seen in the MANUFACTURERS' RECORD your tasteful advertisement of Basic City, and having heard of it before as a place "beautiful for situation," and one to be desired in respect of the many natural and incidental advantages it has to offer, I came to-day to view for myself the site of the future city, and to learn more of the plans and proposed movements of the company. My time, however, has been all too brief to admit of as full and satisfactory an investigation as I could wish, but I have seen enough to confirm my previous favorable impressions.

I heartily endorse all that has lately been said by your special correspondent in reference to the topography of Basic City, as high, dry and healthy, with broad and suitable grounds for manufacturing plants, a suitable elevation for business blocks, and charming residences and superior natural drainage. There is here a rare combination of beautiful natural scenery, abundant transportation by rail in all directions, unlimited supplies of fine brown hematite iron ore and manganese at hand, with the purest of air and water, and all in the midst of a moral and highly cultivated community. But notwithstanding all these auguries of success, the company does not propose to put any of its lots upon the market until after the erection of a number of industrial plants and the enlargement of the pay roll to an extent sufficient to support a considerable population of manual laborers. This is a measure commendable not only for its foresight, but as an indication of the honorable character of the managers of the company, who while they wish to make money themselves, have no desire but to advance the best interests of all who join their alliance. It is not expedient that I should reiterate what has already been so graphically and fully set forth in your columns, even to the smallest minutiae, of Basic's claims upon the public attention. Let it suffice that I pronounce it true as a whole, and am well pleased with the result of my own investi-

gation. I am sure no company is doing more for the advancement of the interest of its stockholders than the Basic company. Returning to Arkansas, I shall not only bear with me the most lively and pleasing impressions of the embryo city, but may identify myself with its growth so soon as I can release some funds to that end not now immediately at my command.

The quality of the ores as analyzed by Prof. Andrew S. McCrae, Harrisburg, Pennsylvania, is shown to be superior, the brown hematite having a base of 50 to 60 per cent. of pure metallic iron. There are also fine surface indications of manganese of superior quality and quantity, but the company is modest in its claims, and means to dwell only upon such features as need no factitious embellishment, and which are potent to the most superficial observer.

I am authorized to say that the company will soon have in operation a hundred-ton furnace and several other plants, and the Basic City, West Virginia & Pittsburgh Railroad, as chartered by the legislature of Virginia, will afford this community the third outlet by rail to a rich section of country not now accessible, and will tap the B. & O. road at some point between Staunton and Harrisburg. The Herman Iron Co., whose lands adjoin those of Basic City, propose to erect a \$300,000 furnace with the next few months, and this, with all the projected improvements, will give Basic City an impetus such as its superior advantages so richly deserve.

In all my travels I have met with no place the surroundings of which, taken as a whole, and with a bright future not yet actually assured, that gives evidence of a more thrifty and permanent growth, or one that has more to offer as to hygienic, social, educational and religious enjoyment, or where there will be less discrimination made between settlers from all sections of our common country.

ARKANSAS TRAVELER.

Standing Up for Birmingham Ore and Coke.

BIRMINGHAM, ALA., Feb. 17, 1890.
Editor Manufacturers' Record:

But for the extensive circulation of your paper, I would not attempt to correct some erroneous statements contained in an article headed, "The South, its resources ably discussed by Col. A. M. Shook," recently republished from the Nashville Herald. I refer especially to his statements pertaining to the Birmingham district, where he particularly refers to the coking coal. If Col. Shook would make an effort in the proper direction to inform himself more carefully about the coking coal of this district, he would find that the coke made and furnished by the DeBardeleben Coal & Iron Co., of Bessemer, Ala., has very nearly run all imported coke out of this market for foundry use. In fact, I can furnish the names of industries in this district that have met with much greater success in the use of coke produced by the DeBardeleben Coal & Iron Co. than that they have been using for months from Southwest Virginia, which Col. Shook thinks so much of.

In reference to the brown ore deposits of the Birmingham district, he also expressed himself in such a manner as to show he is not at all familiar with the advantages of the Birmingham district, over any such developments so far made in this country. The writer can show Col. Shook a deposit of brown ore within close proximity to Birmingham sufficient to supply all the furnaces in this district for the next ten years, easily and cheaply mined, much more so than any now developed.

Col. Shook may be familiar with the Tennessee deposits, but I would suggest that he familiarize himself with the Birmingham, Ala., deposits before submitting to another interview.

GEO. C. KELLEY.

BUENA VISTA.

The Most Inviting Town in Virginia as a Location for Manufacturers.

In a Magnificent Farming Country—the Famed Shenandoah Valley—Surrounded by Inexhaustible Wealth of Iron and Timber.

A Wide Diversity of Enterprise, Including FURNACE. STEEL WORKS, ROLLING MILL, PULP and PAPER MILL, TANNERY, WOOLEN MILL, WAGON WORKS, &c., &c., Already Secured.

Extracts from the Annual Report of the President and Directors, made Feb. 13, 1890:

Every development made upon your Mineral Properties has demonstrated its wonderful wealth of resources, and to-day we are able to say that you have the richest and most valuable mineral property in Virginia, and for extent, not surpassed in the South.

The fertile and extended plains, devoted eight months ago to agriculture pursuits, are now the scene of busy activity, in grading the wide streets of the town, in laying lines of pipes for its water supply, in the building of its handsome and stately business houses, and comfortable and attractive homes.

The waste lands lying along the North River are sites for extensive and valuable manufacturing enterprises, aggregating nearly a million of dollars, already secured, and many more which will be undoubtedly established during the coming year.

Your attractive and well-kept hotel has been found entirely inadequate for the accommodation of its guests, and an addition is now being made which will add about fifty rooms. Its unparalleled location affording charming views of mountain, plain and river scenery, has made it a most desirable resort, and many families expect to make it their summer home.

The valuations, which are submitted herewith, are made by competent gentlemen not connected with the Board of Directors, selected by the Buena Vista Real Estate Exchange, and the prices given are one-fourth less than those paid for lots actually sold for cash in the respective sections.

The plans for the building of the town have been taken with care, and the erection of over \$250,000 of buildings is assured within the coming twelve months, outside of what may be done by the lot owners in their individual capacity.

Whilst the revenues derived from the property might justify the payment of a large dividend upon the stock of the company, your Board of Directors submit it to your better judgment whether it is not wiser to forego a present advantage for a much larger return in the use of these earnings in the future development of the town.

Several large industrial enterprises, employing many skilled workmen, can now be secured for Buena Vista if we are enabled to subscribe liberally to the stock. The benefit to be derived from the location of such industries will ultimately far exceed any dividend which might now be declared.

It is of the first importance that a considerable sum of money be at once devoted to securing an ample supply of water and a complete system for lighting the town. With the assurance to our stockholders that the present revenue shall be devoted to these purposes, the Board of Directors have declined to declare a dividend.

The whole course of the Board in the management of the enterprise entrusted to them has been conservative, preferring to lay the foundation for real future solid worth, rather than to make present speculative values. This policy has been pursued in making the statement and the estimates now submitted to the stockholders; your Board would recommend the continuance of the same policy.

Receipts and Disbursements to Feb. 1, 1890.

AMOUNTS RECEIVED.

Received for Stock	\$297,811.38
" Interest	5,917.92
" Sale of Lots	40,890.45
" from all other sources.....	12,355.99
	\$356,975.74

AMOUNTS PAID OUT.

General expenses.....	\$ 81,069.12
Expenses of streets and water works.....	10,869.10
Paid for real estate.....	123,608.67
Loans.....	2,000.00
Stock in manufacturing enterprises.....	32,250.00
Cash in bank.....	107,178.85
	\$356,975.74

FINANCIAL CONDITION.

ASSETS.

Value of unsold lots, hotel, office, &c., within corporate limits.....	\$ 591,602.00
Bills receivable.....	65,666.05
Amount due on stock.....	82,496.36
Interest due on stock.....	4,778.42
Stock in industrial companies	92,500.00
Open accounts, lumber, &c.....	25,000.00
Inventory—horses, carts, tools, &c.....	1,000.00
Inventory—mining machinery, &c.....	2,145.55
Cash in bank.....	107,178.85
Value pipe line and water works.....	5,000.00
Estimated value of all mineral, agricultural and timber lands, including 1,200 acres adjoining present town site and equally suitable for town purposes.....	1,000,000.00
	\$1,977,367.23

LIABILITIES.

Capital stock issued and outstanding.....	782,200.00
Balance due on real estate 1 and 2 years....	85,000.00
Interest on same to 1st February, 1890.....	3,825.00
Due on subscription to stock in Industrial Co.	58,750.00
Due on addition to hotel and office building.	20,000.00
Surplus	1,027,592.23
	\$1,977,367.23

FOR INFORMATION ABOUT BUENA VISTA, WRITE TO

The Buena Vista Company,
BUENA VISTA, VA.

To MANUFACTURERS.

For the Next Sixty Days

BASIC CITY, VA.

Whose Lots and Lands Completely Encompass

The Crossing of the Two Great Coal Carrying Lines of Virginia,

Viz: THE CHESAPEAKE & OHIO RAILROAD, and THE SHENANDOAH VALLEY RAILROAD.

Will offer EXTRAORDINARY INDUCEMENTS for the removal and Establishment of

MANUFACTURING PLANTS.

THE PLAN OF THE

Basic City Mining, Manufacturing & Land Company

is to secure Substantial Industries before placing a single one of its lots on sale, and therefore during the NEXT SIXTY DAYS the Company will Offer to Manufacturers Greater Inducements than any competing town in the South or West.

FOR PARTICULARS AS TO THE SPECIAL ADVANTAGES OF BASIC CITY ADDRESS

SAMUEL FORRER, President and General Manager, BASIC CITY, VA.

 Information as to the financial standing and resources of this Company may be had by addressing the AUGUSTA NATIONAL BANK or the NATIONAL VALLEY BANK, of Staunton, Va.

PIEDMONT, ALABAMA.

* Delaware's Southern City. *

IN THE VERY HEART OF BROWN IRON-ORE DISTRICT.

Full Paid Capital of the Piedmont Land & Improvement Co. \$1,250,000

Large Portion of which will be Employed Establishing Great Industrial Plants.

The following enterprises and industries are guaranteed by the PIEDMONT LAND AND IMPROVEMENT COMPANY, all of which are now well under way:	
A 50-ton Charcoal Iron Furnace.	The best system of Electric Lights.
A large iron Rolling Mill.	Graded and Macadamized Streets.
A Car Wheel Works.	A \$35,000 Hotel Building.
Three Saw Mills.	A Bank Building, (for Bank of Piedmont), the finest in Northern Alabama.
An excellent system of Water Works.	

The Piedmont Land and Improvement Company have also closed contracts with two Eastern capitalists, who will at once erect forty dwelling houses, to cost not less than \$1,400 each, which will represent, when completed, together with the ground covered, an investment of over \$100,000.

These will be followed in the near future by the following, negotiations for several of which are now nearly completed :

Two 100-ton Coke Iron Furnaces	A Passenger Car Works.
A Basic Steel Plant.	A Sewer Pipe Works.
A Large Planing Mill.	A Brick Works, and several other industries.
A Carriage and Wagon Factory.	

Such are a few of the many advantages that Piedmont offers to the manufacturer and to the investor, who are cordially invited to come and examine for themselves.

FOR ADDITIONAL INFORMATION ADDRESS

Piedmont Land & Improvement Co.
PIEDMONT, ALA.

200,000,000 TONS OF BROWN IRON ORE

IN SIGHT AT **BLUFFTON,** 

**HIGH, HEALTHY AND HONEST.
GOOD PEOPLE AND GOOD WATER.**

LOCATED UPON THE ALABAMA DIVISION OF THE EAST TENN. VA. & GA. RY. SYSTEM.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889 article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

With high grade ores, analyzing over 50 per cent metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the dullest of dull times?

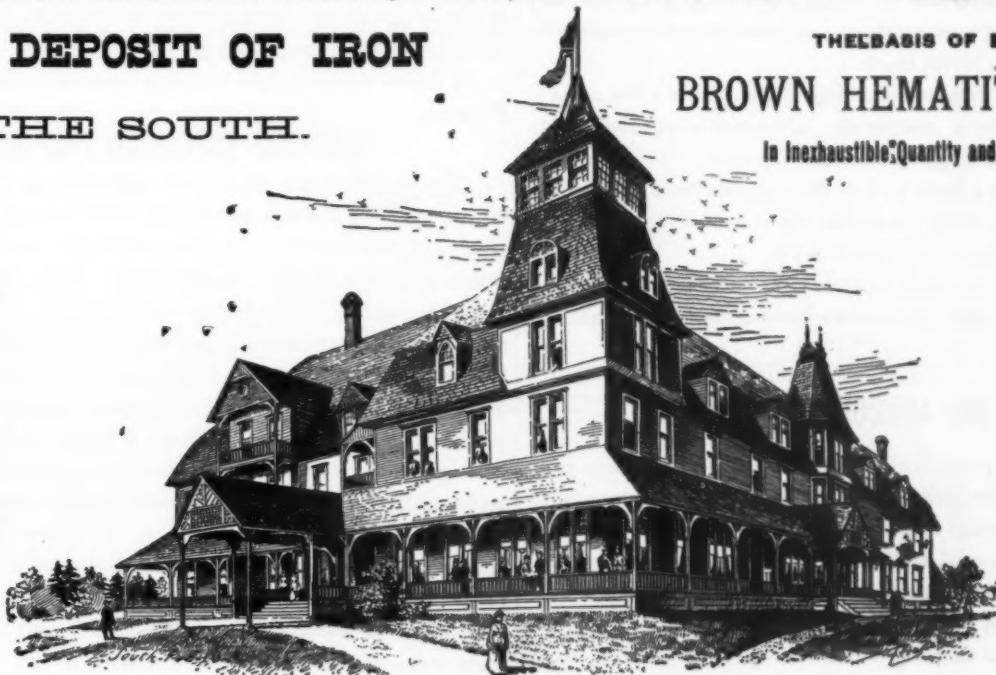
Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, marked "Bluff Ore," contains—	The sample marked "Gravel Ore" contains—
Metallic iron, - - - 53.37 per cent.	Metallic iron, - - - 53.23 per cent.
Phosphorus, - - - 0.782 "	Phosphorus, - - - 0.931 "
Silica, - - - 14.60 "	Silica, - - - 6.25 "
Water combined, - 8.10 "	Water combined, - 10.20 "
Moisture at 100° C - 2.50 "	Moisture at 100° C - 1.68 "

LARGEST DEPOSIT OF IRON

IN THE SOUTH.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

BROWN HEMATITE IRON ORE

In Inexhaustible Quantity and Excellent Quality.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

FREE MANUFACTURING SITES.

Rich Manganese Deposit.

There are several very large and rich outcroppings of Manganese Ore on the company's property, and the deposits have been examined by experts and pronounced exceedingly valuable. Specimens have been sent to various steel works in Pennsylvania, and the result is a large inquiry about the ore. From present development can be seen several hundred tons of this ore. There is always a ready market for manganese, and it is quoted at \$18 to 20 per ton in Pittsburgh and Chicago. More extensive work will be done on these deposits within a very short time, as the banks are easily accessible. Shipments will soon be made.

OTHER RESOURCES.

Fire Clay and Brick Clay—Yellow Ochre.

On this property are large deposits of fire clay, which has stood the highest test. Shipments have been made to Chattanooga, Tenn., and it is pronounced a superior quality. A fire brick works could be established here that would prove extremely profitable.

In brick clay there is an inexhaustible quantity, with an abundance of water running through the clay land. Brick manufacturing here would pay handsomely, and the company would lease the clay beds for a term of years at a very low royalty.

The four charcoal pig-iron furnaces surrounding this property are nearly as valuable to this place as if they were located on the land of the Bluffton Company. The pig iron manufactured by them could be bought and utilized here for every kind of manufactured iron. They are so near that freight on the raw material would be comparatively nothing. Surrounding us, as these furnaces do, it makes Bluffton a centre.

SEND FOR PROSPECTUS. ADDRESS

Bluffton Land, Ore & Furnace Company, Bluffton, Ala.

FACTS ABOUT FLORENCE.

LOCATION.

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

AGGREGATE OF ADVANTAGES.

There are many places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

IRON AND COTTON MANUFACTURING.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the axe has never touched.

COMMERCIAL AND AGRICULTURAL FACILITIES.

Besides its industrial possibilities, Florence is a point of great commercial importance, and is becoming the center of an extensive mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Several additional railroads are now under construction to open up new trade connections to Florence.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

BEAUTY OF LOCATION.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to either one of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Lauderdale Manufacturing Co. Florence Cotton and Iron Co.

Florence Investment Co.

Florence Railroad and Improvement Co.

GROWTH.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

SOLID GROWTH.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

THIRTY NEW ENTERPRISES.

Within the last 12 or 15 months over 30 new industrial enterprises have been located at Florence, with an aggregate cash capital of about \$5,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

INDUSTRIAL ENTERPRISES IN OPERATION.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: One of the largest and best furnaces in the United States now in blast, and another under construction; a stove factory; a hardware company, with a capital of \$300,000, manufacturing fine building hardware, &c., the only factory of the kind in the South; a wagon factory, with capital of \$150,000; agricultural implement works; handle factory; woodenware factory; sash, door and blind factories; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill in operation, and a \$500,000 mill building and others projected; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a compress, packet and ferry company; building and loan companies; a canning factory; brick factories; a dummy railroad company, and a number of other enterprises.

\$15,000,000 INVESTED.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now about 10,000.

There are more than 1,000 carpenters at work in Florence but they can't build houses fast enough to keep up with the increase in population.

INVESTIGATION AND INVESTMENT.

A number of the foremost capitalists and iron and cotton manufacturers, and others, of Philadelphia, Boston and other Eastern cities, after a thorough personal investigation, have just made heavy investments aggregating several million dollars in Florence.

Florence, Ala.

Morristown, Tenn.

The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Bay's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants. It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of unculled forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. The Celebrated East Tennessee Marble underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsburg coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



MORRISTOWN

has a citizenship composed almost exclusively of native born Americans. It boasts a splendid system of Graded Schools, Five commodious Brick Churches, the finest Courthouse in Upper East Tennessee, an Opera House that will seat 600 people, two Solid Well Managed Banks, a flourishing Building and Loan Association, two of the Largest Commercial Flouring Mills in the South, Stove Works, an Agricultural Implement Factory, two Wood-working Factories, a Tobacco Factory, a Carriage and Wagon Factory, and many industries of lesser note.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

Persons who may desire fuller information can obtain it by calling on or addressing

MONTVUE LAND COMPANY

POSTOFFICE BUILDING, — MORRISTOWN, TENNESSEE.

CHARLOTTESVILLE, VA.

OFFERS

Great Advantages and Liberal Inducements to Manufacturers

DESIRING TO LOCATE SOUTH.

Railroad Facilities, Cheap Rates and Rapid Transportation to all Points Unexcelled.

PERFECT CLIMATE.

UNLIMITED SUPPLY OF EXCELLENT WATER.

Gas, Electricity and Street Railway. Free Schools and Churches. Different Lines of Manufacturing Enterprises Already in Successful Operation Here.

A LIVE AND GROWING PLACE.

HOME CAPITAL WILL JOIN IN THE ESTABLISHMENT AND OPERATION OF FACTORIES.

COME AND SEE, OR WRITE TO JOHN M. WHITE, President.

CHARLOTTESVILLE INDUSTRIAL & LAND IMPROVEMENT CO., Charlottesville, Va.

CAMDEN,

The Capital of Kershaw County,
South Carolina.

This ancient and historic town is noted for its dry atmosphere, pure water, beautiful scenery, healthful climate and refined society.

It is the center of a rich agricultural country, which contains great natural resources. Hardwoods of many species are abundant, and great forests of long leaf pine, which impregnate the air with terebinthine odors. Several good hotels entertain travelers, and two are carefully conducted for the especial comfort of northern health and pleasure seekers.

Manufacturing of all kinds can be done here advantageously. Two railroads, the South Carolina and the Charleston, Cincinnati & Chicago, furnish transportation to all parts of the country. Two telegraph lines, the Postal and the Western Union, have offices here.

Churches and schools are numerous and well sustained.

A cotton mill company has been organized, and the first installment of twenty per cent. has been called in.

Land is cheap. The climate is salubrious, and subject to no extremes during the year.

Camden invites capitalists, manufacturers, pleasure and health seekers and sportsmen to visit the city and examine the advantages it offers to all.

All inquiries will be promptly answered by the undersigned, official representative of the intendant and warders.

DR. JOHN W. CORBETT
Or the President of the Board of Trade.

GEO. T. McWHORTER, Pres't., Chickasaw, Ala.
JAS. M. ALLEN, Secretary, Waterloo, Ala.

Capital Stock \$200,000.

THE WATERLOO

Land, Mining & Mfg. Co.

WATERLOO, ALA.
(Lauderdale Co.)

Will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of this character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals and consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be billed from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than any other town in Alabama (Chickasaw excepted). Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the State. Present price of bark at landing \$4.50 per cord. Special facilities for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.

DENISON, TEXAS.

THE
Future Manufacturing and Commercial Center
OF THE
GREAT SOUTHWEST.

DENISON SUPPLIES THE COAL FOR TEXAS.

She has at her gates the only COKING COAL of any value in the Mississippi Valley. To the Southwest lies the best MAGNETIC IRON ORE in the world, while to the north and Southeast are fields of BROWN HEMATITE ORE of the finest grade. These ores must meet the COKE and COAL at DENISON and there to be worked.

DENISON cannot be surpassed for HEALTHFULNESS and BEAUTY of location. Six divisions of railways terminate at Denison and are operated by her citizens.

DENISON has an abundant supply of pure, soft water and plenty of good, cheap BUILDING MATERIAL.

The attention of investors and those seeking advantageous locations for business or for manufacturing plants is invited to the opportunities presented at Denison.

MUNSON & BRO. HAVE SUPERIOR FACILITIES FOR THE SAFE AND PROFITABLE INVESTMENT AND HANDLING OF CAPITAL.

For information about DENISON and for bargains in BUSINESS and RESIDENCE PROPERTY, ACRE PROPERTY and FARMS NEAR THE CITY, write or call upon

MUNSON & BRO.

301 WOODWARD STREET,

DENISON, TEXAS.

DENISON, TEXAS.

The "Yankee" City of the Southwest,

— AND —

* GATEWAY *

— TO THE —

GREAT STATE OF TEXAS.

The City of Denison presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

DENISON is situated in Northeastern Texas near inexhaustible beds of coal and iron, surrounded by the finest fruit lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The growth of Dennison has been a natural one, the city having reached its present size—16,800 population—in sixteen years.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The first public school in the State was established here, and the city's elegant two and three story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year.

We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works, giving the citizens ample protection against serious loss by fire, and enabling the insurance companies to rate the city first class as to fire hazard. Rate of taxation low.

The city has four miles of street railway, with six miles now building to be operated by steam motor; has two electric light companies and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

A large hotel, to cost \$125,000, is to be erected here this year, and a large steel plant with \$2,000,000 of capital is contemplated.

30,000 bales of cotton were shipped from Denison in 1888. 200,000 baskets of strawber-

ries and several carloads of peaches and other fruits have been shipped to market this season.

The Denison Canning Co., capitalized at \$100,000, has one of the largest canning factories in the country.

A cotton mill company with a capital of \$500,000 is building a 25,000-spindle cotton mill.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory has been increased from a daily output of 15 tons to 30.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

THE DENISON LAND & INVESTMENT COMPANY,

DENISON, TEXAS.

Paid-Up Capital, - - - - - \$1,200,000.

OFFICERS:

W. P. RICE, President.

MILTON H. FRENCH, Vice-President and General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

DIRECTORS:

W. P. RICE,
J. M. FORD,
A. R. COLLINS,

Kansas City, Mo.
Kansas City, Mo.
Denison, Tex.

B. J. DERBY,
PAUL LANG,
M. V. B. CHASE,

Burlington, Vermont.
Oxford, N. H.
Augusta, Maine.

MILTON H. FRENCH, Thomaston, Maine.
A. H. COFFIN, Denison, Texas.
JOS. B. LINCOLN, Boston, Mass.

FORT PAYNE, Alabama.

★ COME TO ★

The NEW ENGLAND CITY of the South.

Climate Unsurpassed. Abundance of Pure Water. Drainage Excellent.

No Better Point in the Union For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham. Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light. Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated.

Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

 Correspondence solicited.

CAPITAL \$5,000,000.

OFFICERS.

President, - - - - -	COL. J. W. SPAULDING
First Vice-President, - - - - -	HON. D. H. GOODELL
Second Vice-President, - - - - -	HON. HENRY B. PEIRCE
Secretary, - - - - -	C. L. T. STEDMAN
Treasurer, - - - - -	F. H. TOBEY
Manager, - - - - -	C. O. GODFREY

BOARD OF DIRECTORS.

HON. D. H. GOODELL, of Goodell Mfg. Co., Antrim, N. H.
HON. HENRY B. PEIRCE, Secretary of State of Mass.
GEN'L SELDEN CONNOR, Ex. Gov. of Maine, Pres.
Northern Banking Co., Portland, Maine.
COL. J. W. SPAULDING, Ft. Payne, formerly of Portland, Me.
HON. F. G. JILLSON, Providence, R. I.
HORATIO ADAMS, Boston, Massachusetts.
W. J. CAMERON, Pres. First Nat'l Bank, Birmingham, Ala.
COL. JOHN B. BODDIE, Birmingham, Ala.
W. P. RICE, Pres. Union Investment Company of Kansas City, resides Fort Payne, Ala.

FORT PAYNE COAL & IRON COMPANY, Fort Payne, Ala.

MIDDLESBOROUGH,

KENTUCKY.

"The Wonder of the Age in Town Building."

The Future Iron and Steel Center of America.

THE PASSAGEWAY FOR RAILROADS BETWEEN THE WEST AND THE EAST.

A SOURCE OF COKE SUPPLY FOR THE SOUTH AND WEST.

THERE ARE NOW UNDER CONTRACT:

- | | |
|---|---|
| A Basic Steel and Iron Plant, daily capacity 300 tons, to cost \$1,000,000 and to employ about 1,000 hands. | A Dozen Wood-Working Enterprises. |
| An Iron Rod Mill; A Sheet Mill; A Nail Mill. | A Twelve-Mile Belt Railroad. |
| Two Coke Iron Furnaces, 150 tons daily capacity each, and one Charcoal Furnace. | Tile Works, Fire and Building Brick Works, and a dozen or more other enterprises. |
| A \$500,000 Tannery—the largest in the world | |
| Fourteen Coal Mining Enterprises, to employ about \$2,000,000 capital. | |

\$18,500,000

Already Invested in the Development of Middlesborough.

Other New Industries are Being rapidly added to those already in operation and contracted for.

COAL, IRON, TIMBER
AND OTHER RAW MATERIALS.

DELIGHTFUL AND HEALTHFUL MOUNTAIN CLIMATE,

WHERE MALARIA AND THROAT AND LUNG TROUBLES ARE UNKNOWN.

Elevation from 1,300 to 2,400 feet above the Sea Level.

SURROUNDED BY VALLEYS OF RICH AND PRODUCTIVE FARM LANDS.

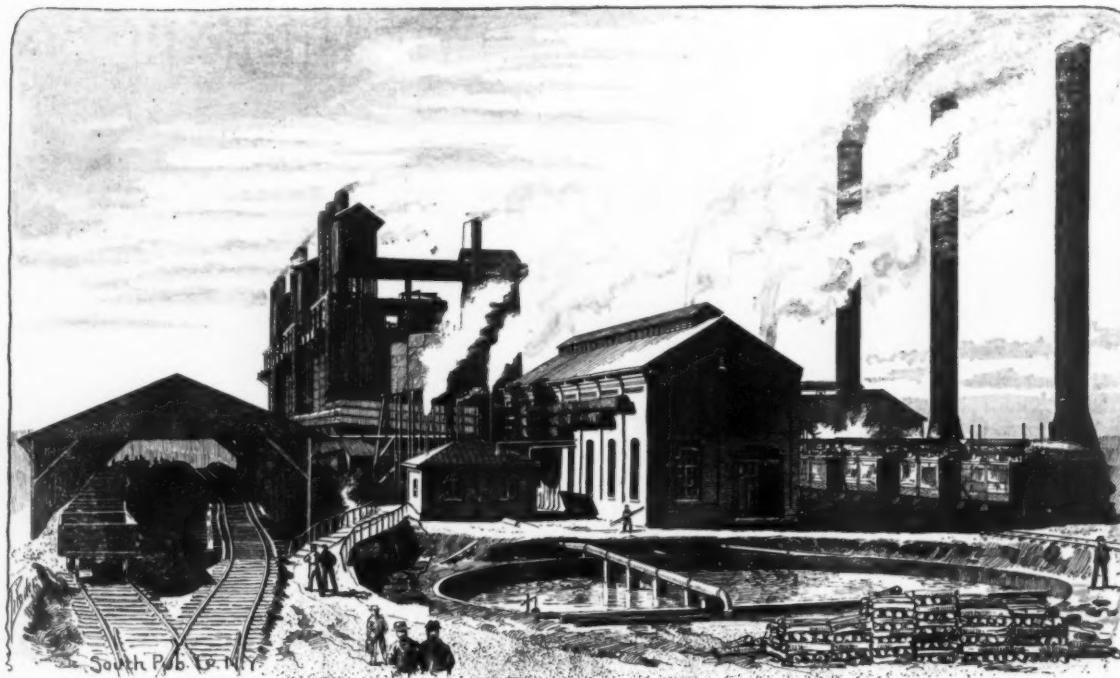
SEND FOR CIRCULARS, PROSPECTUS, MAPS, ETC., TO

MIDDLESBOROUGH TOWN COMPANY.

MIDDLESBOROUGH KY.

SHEFFIELD, ALA.

THE SUPERB.



At the Headwaters of Deep Navigation on the Tennessee River, the Hudson of the South.

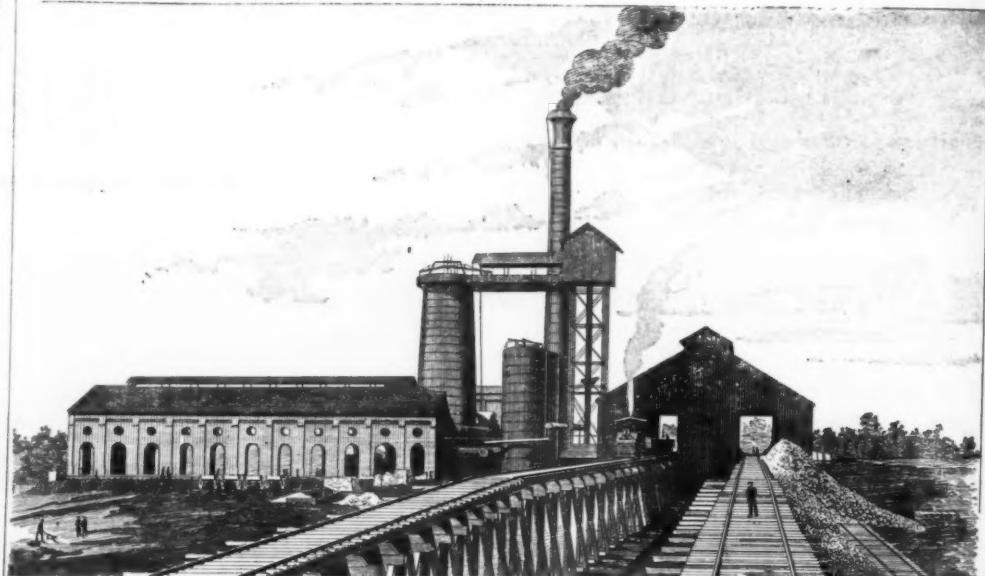
The Largest Producer of HIGH-GRADE Pig Iron of any City in the Entire Industrial South.

The only point in the South that has or can ship pig iron to the cities on the Mississippi, Missouri and Ohio rivers by boat or barge without rehandling. This last shipment of **5,000 tons of Pig Iron to Pittsburgh, Pa., by barge** was made at a saving of \$2.65 per ton over what any iron-producing city of the South has done or can do to-day.

Five Large Blast Furnaces

Capacity 750 tons pig iron per day.

The following are among the corporate and private enterprises that belong to Sheffield:
 The Sheffield Land, Iron & Coal Co., capital \$1,000,000.
 The Sheffield & Birmingham Coal, Iron & Railroad Co., capital \$1,000,000; the owners of three 150-ton blast furnaces.
 The Birm., Sheffield & Tenn. River Railway Co., capital \$5,000,000.
 The Hattie Ensley Furnace capital \$200,000.
 The Lady Ensley Furnace Co., capital \$200,000.
 The Electric Light & Gas Fuel Works, \$50,000.
 The Sheffield Ice Co., capital \$25,000.
 The Sheffield Manufacturing & Constructing Co., \$30,000.
 The Sheffield Contracting Co., \$60,000.
 The Eureka Brick & Lumber Co., \$30,000.
 The Howard Brick Co.
 The Sheffield Bakery & Bottling Works.
 The Sheffield Mineral Paint Co., capital \$50,000.
 The Sheffield Agricultural Works, capital \$40,000.
 The Sheffield Cotton Compress Co., \$60,000.
 Millan Brothers, Steam Laundry.
 Enterprise Publishing Co.
 Water Works, already expended, \$30,000.
 Sheffield Street Railway Co., capital \$100,000.
 Cleveland Hotel Co., capital \$50,000.
 Sheffield Hotel Co., capital \$120,000.
 Bank of Commerce, capital \$150,000.
 East Sheffield Land Co., capital \$500,000.
 Hull & Keller's Fern Quarries.
 Mobile Real Estate Co., capital \$50,000.
 Sheffield Real Estate Co., capital \$50,000.
 Sheffield & Mobile Improvement Co., capital \$100,000.
 Sheffield Stove Works.
 Henderson Milling Co., capital \$100,000.
 Globe Iron & Brass Works, capital \$10,000.
 Standard Machine Shop & Foundry, capital \$50,000.
 Owen Pink Mixture Co., capital \$100,000.
 Bell Telephone & Telegraph Co.
 Foulds' Shoe Factory, capital \$20,000.
 Enterprise Wood Working Co., capital \$30,000.
 Buchanan Straw Goods Factory, \$25,000.
 The Sheffield Harness & Saddlery Co., capital \$20,000.
 Principal Shops of the Sheffield & Birmingham Railroad.
 Principal Shops Memphis & Charleston Railroad, now being built.



Aside from the foregoing the following are in course of construction and may be considered positive: Principal Shops of the Memphis & Charleston Railroad; Principal shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad. Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill; Large Machine Shop; A Cotton Mill.

ALABAMA'S IRON CITY.

The Superb Location at the head of navigation on the Tennessee River, commanding the outlet to immense fields of IRON ORE and COAL and magnificent tracts of the finest Timber. Has already attracted to the spot where three years ago in a cotton field her projectors set the stakes of a new city, capital and people, unequaled in amount and number, circumstances considered, by any of the so-called new cities of the South.

With eight Church Organizations, two Free Public Schools, Postoffice, Telegraph and Express offices and abundant facilities of transportation by river and rail. It has every advantage as a residence city that can be desired.

Good Water; Drainage Excellent; Health and Climate Unparalleled. Free Public Schools and Churches. Splendid opening for men of push and energy. No better point for profitable investment. No "Old Fogey" element here.

Sites for Manufacturing Enterprises

And for Free Public Schools and Churches

Donated by the Sheffield Land, Iron & Coal Company.

Printed information furnished on request. Correspondence solicited. Communications should be addressed

W. L. CHAMBERS,

Vice-President and Manager.

Sheffield Land, Iron & Coal Company,

SHEFFIELD, ALABAMA.

CITY OF GRAND RIVERS, KENTUCKY.

A New Industrial City of the South.

SITUATED upon a narrow strip of land between the Tennessee and Cumberland rivers near their entrance into the Ohio, practically in the Mississippi Valley, forming a system of river transportation unequalled by any location in the South, being by river or rail several hundred miles nearer the great Western markets. The Newport News & Mississippi Valley Railroad runs directly through the Company's coal, iron and city property.

Chief among its resources are its immense banks of brown hematite iron ore, existing in gigantic pockets and showing enormous outcroppings from leads extending over thousands of acres of the Company's lands, assays from which show metallic iron 50 to 66 per cent, with practically no phosphorus or sulphur.

Pig iron can be laid down in Pittsburgh from Grand Rivers, by reason of its river system of transportation, \$2.50 per ton cheaper than from Birmingham, Ala.

The quantity of coal upon the Company's lands is practically inexhaustible, its measures, eleven in number, ranging from four to seven feet in thickness, and available upon nearly all of the three thousand acres of the Company's coal lands. This coal has been found to possess superior qualities as a coking, steaming or domestic coal.

As a manufacturing center Grand Rivers has no equal in the South. The saving to the manufacturer from its cheap

rates of freight and cheap coal will prove a source of profit equal to a liberal dividend upon his invested capital.

The Company own 21,000 acres coal, iron ore and timber lands convenient to its furnaces, together with 3,000 acres city lands situated upon the banks of both rivers.

Surveys are nearly completed, and the streets are being graded. Industries of various kinds are now locating their plants, and in a short time there will be seen a rapidly growing and substantial city.

A building association has been formed for the erection of permanent brick buildings for business purposes and dwellings, operations upon which have already commenced. A bank is being organized. Two large charcoal furnaces are under contract, and numerous other industries in contemplation.

Thus, with ample capital, Northern enterprise and good management, Grand Rivers will take a prominent position in the great manufacturing cities of the South.

The Company offer the most liberal encouragement to manufacturers wishing to establish plants there, and will give to them every facility in their power to make their enterprises successful.

The city lands are now being platted, streets graded, and everything put into an attractive condition for visitors and investors.

The Lots will be Offered For Sale APRIL 2d,

WHEN AMPLE ACCOMMODATIONS WILL BE PROVIDED FOR ALL WHO MAY ATTEND THE SALES.

FOR INFORMATION, PRINTED MATTER AND EXCURSION RATES FROM BOSTON, ADDRESS

**BROWN, RILEY & CO., BANKERS, 9 Congress St., Boston, or GRAND RIVERS COMPANY,
Grand Rivers, Livingston County, Kentucky.**

CAPITAL - - - \$3,000,000.

PRESIDENT, - - - ARETAS BLOOD, Manchester, N. H.
VICE-PRESIDENT, - - W. W. SMITH, Nashville, Tenn.

ATTORNEY, - - - JAMES NORFLEET, Grand Rivers, Ky.
SEC'Y & TREAS., - - JAMES L. HALL, Kingston, Mass.

BOARD OF DIRECTORS:

ARETAS BLOOD, Manchester, N. H.
BENJAMIN DORE, Lynn, Mass.
S. J. WINSLOW, Pittsfield, N. H.

ISAAC REESE, Nashville, Tenn.
H. L. LAWRENCE, Arlington, Mass.
THEO. PLUMMER, Nashville, Tenn.
J. NORFLEET, Fort Payne, Ala.

W. C. CUTLER, Chelsea, Mass.
A. H. BREED, Lynn, Mass.
JAMES L. HALL, Kingston, Mass.

* A Glorious Day for * THE * MAGIC * CITY.

THE SUBSCRIPTION VOTED securing the completion
of THE ROANOKE & SOUTHERN RAILROAD

From Winston, N. C., to Roanoke, which means a large immediate increase in population, and opens up to the merchants and manufacturers of Roanoke a rich back-country. This, the most important matter ever brought before the freeholders of the city of Roanoke, was carried unanimously. This railway is now completed from Winston, N. C., to Martinsville, Va., and will reach Roanoke within a few months. This will make Roanoke the commercial emporium not only of Southwest Virginia but also of Western North Carolina.

Now is the Time to INVEST in ROANOKE REAL ESTATE

Over One Million Dollars

Has recently been invested in industrial enterprises which are now under way. Capitalists from all sections of the country are invited to investigate the unequalled advantages of our city, bearing in mind that

No Investor in Roanoke Real Estate has ever Lost a Dollar.

And all industrial enterprises pay handsome dividends. There is a great demand for houses of all classes and parties who will invest their money in that way can rest assured of realizing from ten to fifteen per cent.

POPULATION 1880 400, 1890 20,000.

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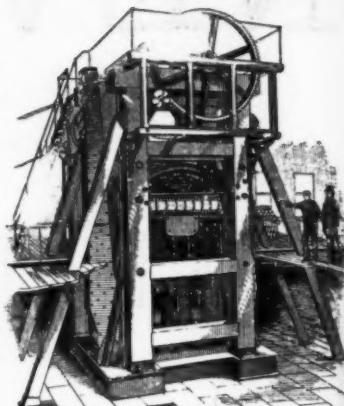
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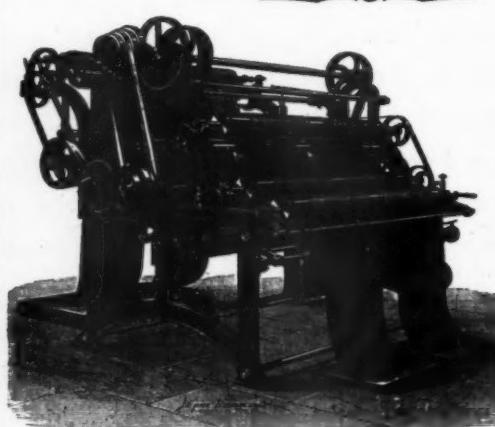
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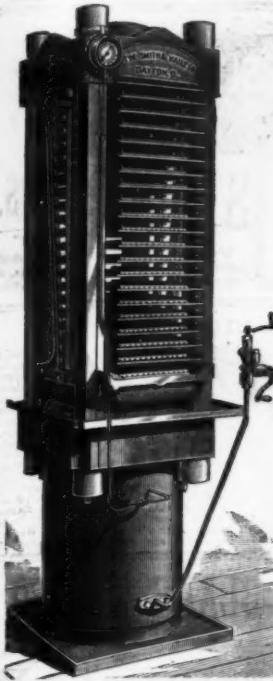
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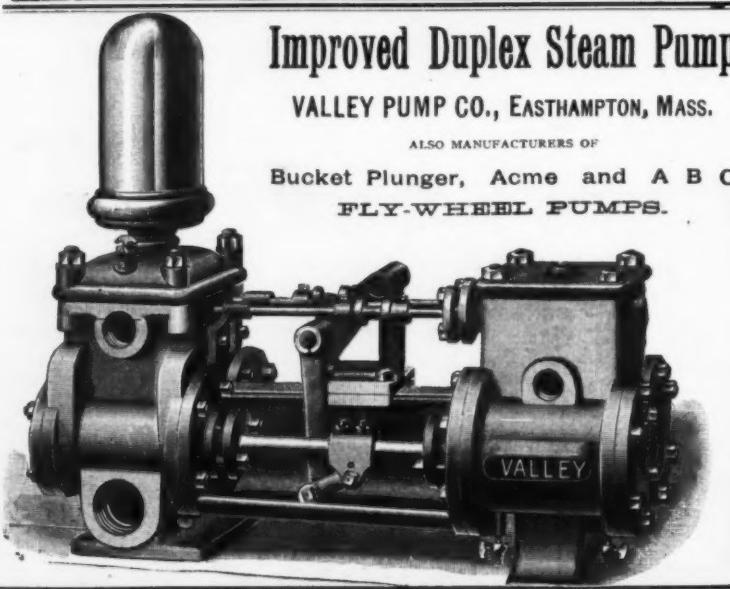


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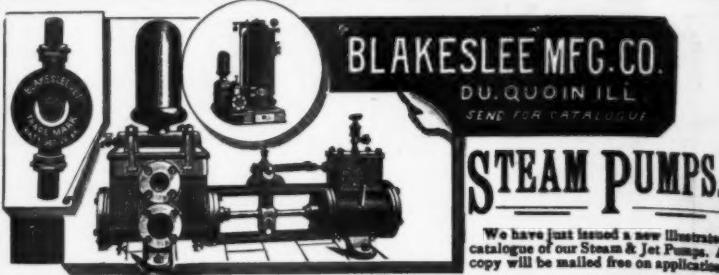
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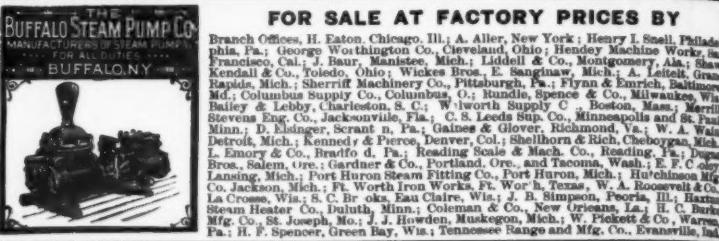


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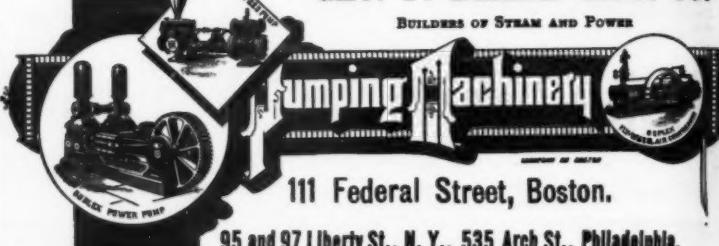


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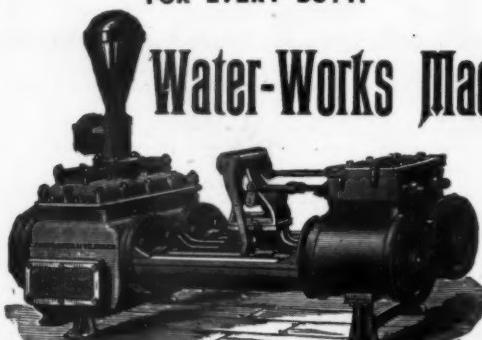
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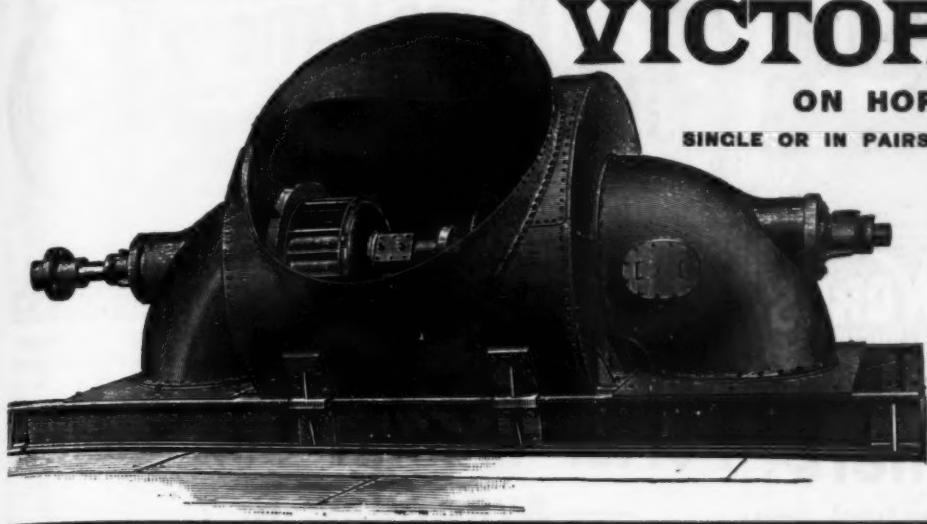
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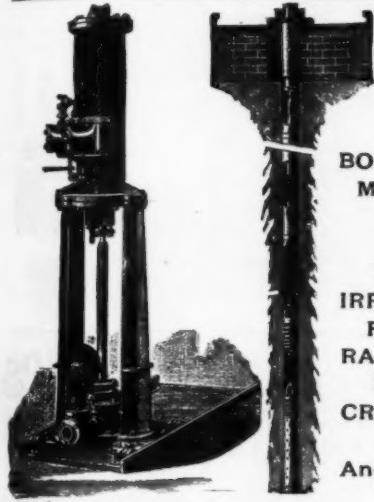
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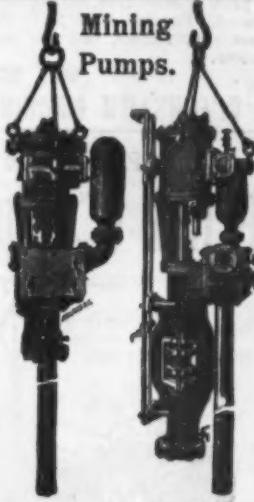
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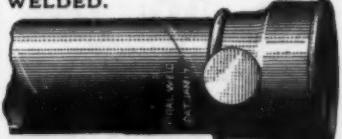
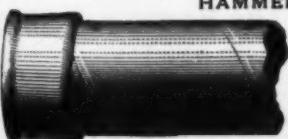
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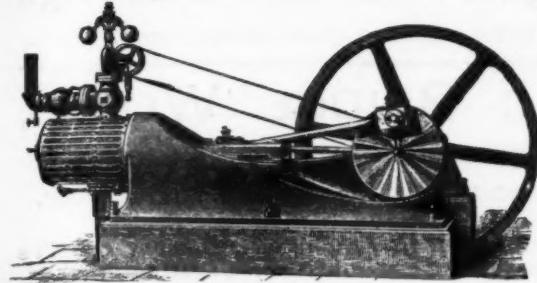
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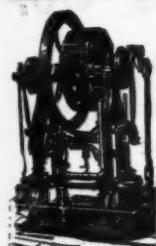
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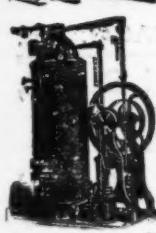
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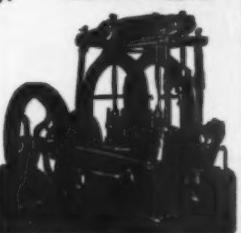
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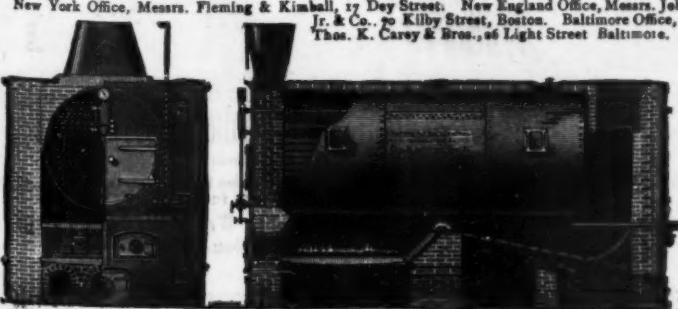
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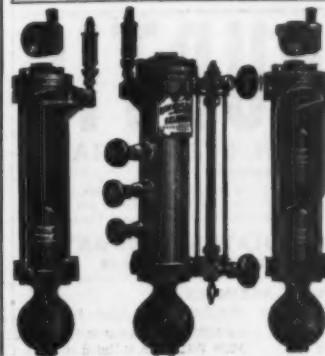


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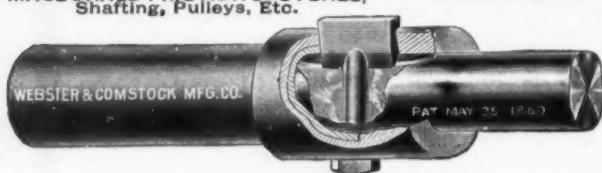
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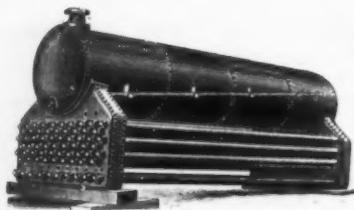
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Justice Toward a New Railroad.

The MANUFACTURERS' RECORD has felt called upon on several occasions to vigorously protest against attempts to shirk responsibility in cases where municipalities or counties have subscribed money toward building railroads through their domain, and then refused to meet their honest obligations on account of some technical or unavoidable violation of the contract. We would urge officials who risk the integrity of their constituents in such cases to read the following manly statement from the Winchester (Ky.) Democrat regarding the Kentucky Union Road. The Democrat says:

By the recent unprecedented rise in the Kentucky river the magnificent bridge across the river near the mouth of Walker's creek was destroyed, and with it the hopes of the road of securing the subscriptions of Clarke and Fayette counties and the city of Lexington. The company has been straining every nerve in order to reach the goal in time, and with flattering prospects of success, but the destruction of the bridge renders it impossible. We are not informed as to what steps the company proposes to take, but an extension of time will probably be asked. It seems to us that this is a state of affairs that appeals strongly to the manliness and sense of justice of our people. The road has endeavored, in good faith, to carry out its part of the contract, and would have succeeded but for this accident. It is little importance to us whether the road is finished in three months or six; far better grant an extension of time and thereby secure a better road than to hurry it up and get an inferior track. The farther the road goes into the mountains the better it is for us, and if the subscriptions are lost the road will be that much shorter.

THE MANUFACTURERS' RECORD trusts that the rumored probability of a consolidation of the Tennessee Coal, Iron & Railroad, the DeBardeleben Coal & Iron and the Southern Iron Co. may not materialize. The South has grown tired of the wild speculation that has for years kept the Tennessee Coal & Iron Co. as a football for Wall street operations. Probably no company in America has ever passed through more speculative deals and manipulations, and while the largest iron producer in the South, it is more generally known for the purely speculative operations in its stock by the various cliques that from time to time control it, than for its heavy production of iron. It owns magnificent properties, and ought to be a conservative but progressive element in Southern iron interests. Should the three companies be consolidated the result would simply be a larger speculative football to be kicked around the country to the disadvantage of these splendid properties and to the injury of the South's business of legitimate iron making rather than stock speculating.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.

Railroad Construction

Abbeville, Ga.—Railroad.—The Abbeville Improvement & Construction Co. has secured contract for constructing 23 miles of the Abbeville & Waycross Railroad, lately mentioned.

Aiken, S. C.—Railroad.—T. G. Lamar & Co. will construct a railroad 1½ miles long to connect their kaolin mines with the South Carolina Railway.

Asheville, N. C.—The French Broad Valley Railroad Co. has given a mortgage deed to the Central Trust Co., of New York city, to secure the loan of \$1,500,000 to be used in the construction of the French Broad Valley Railroad, recently referred to.

Athens, Ga.—Railroad.—It is said the Georgia Railroad & Banking Co. (office, Augusta), the Northeastern Railroad Co. and the Covington & Macon Railroad Co. (office, Macon) will shortly build a connecting line between the three railroads.

Augusta, Ga.—Electrical Railroad.—The Augusta & Sumerville Railroad Co., recently reported, has adopted the Thomson Houston system of overhead electric transit.

Bartow, Fla.—Railroad.—Hon. J. E. Ingram is said to contemplate the construction of a railroad about 6 miles in length to the phosphate beds mentioned elsewhere in this issue.

Birmingham, Ala.—The Birmingham, Powderly & Bessemer Railroad Co. will hold a stockholders' meeting on April 2 for the purpose of considering the issuance of \$50,000 of bonds.

Birmingham, Ala.—Railroad.—The Birmingham Lumber Co., mentioned elsewhere in this issue, proposes to build 10 miles of railroad.

Bristol, Tenn.—Bristol, Tenn., and Bristol, Va., will hold an election on April 10 to ascertain as to the subscription of \$10,000 to the Danville & East Tennessee Railroad Co., lately mentioned, two-thirds to be paid when the railroad reaches Damascus, and the remainder when it reaches Grayson.

Bristol, Tenn.—Railroad.—The East Tennessee, Virginia & Georgia Railway Co. (office, Knoxville) is said to have closed a contract for the construction of a railroad to either Johnson City, Jonesboro or Limestone. It is to be from 7 to 16 miles long.

Bristol, Tenn.—Railroad.—Bristol has voted unanimously to appropriate \$40,000 to aid in the construction of the Bristol, Elizabethton & North Carolina Railroad, lately mentioned. Bonds will be issued.

Brownsville, Texas—Railroad.—A railroad is projected to Corpus Christi, about 135 miles. Brownsville is reported to have subscribed \$100,000 and Corpus Christi \$20,000.

Charleston, S. C.—The Charleston & Savannah Railway Co. has declared a dividend of 2 per cent on first preferred income bonds.

Charleston, S. C.—Railroad.—The South Carolina Railway Co. will soon construct the branch to the Ashley river, mentioned last week. The road is to be only about one-fifth of a mile in length.

Charleston, S. C.—Belt Railroad.—It is stated that Gallagher & McDonald, who are negotiating for the lease of the franchise of the East Shore Terminal Co., allowing the construction of a belt railroad, will, if successful, shortly build the road.

Chattanooga, Tenn.—Railroad.—The Chattanooga Land, Coal, Iron & Railway Co., mentioned elsewhere in this issue is said to contemplate the immediate construction of a bridge and railroad across the Tennessee river, and the building of the Chattanooga Western Railroad. The company also intends to construct a street car line.

Cisco, Texas—Railroad.—A movement is being made to construct a railroad to some point in Clay or Wichita county, so as to connect the Fort Worth & Denver City Railroad (company's office, Fort Worth) with the Houston & Texas Central Railroad (company's office, Houston).

Clarksburg, W. Va.—A mortgage has been filed for record from the West Virginia & Pittsburgh Railroad Co. to the Mercantile Trust & Deposit Co., of Baltimore, Md., to secure payment of bonds amounting to \$4,000,000, payable no years hence.

Clarksburg, W. Va.—Papers leasing the charter, franchises, road, etc., of the West Virginia & Pittsburgh Railroad Co. to the Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) for a space of 99 years have been filed for record.

Covington, Va.—Railroad.—D. D., A. and C. Shanahan, of Louisville, Ky.; S. and J. Vost, of Staunton, E. M. Nettleton and others have organized a company, purchased land, mentioned elsewhere in this issue, and intend to construct a railroad.

Danville, Va.—Railroad.—Ground has been broken for the construction of the Danville & East Tennessee Railroad, lately mentioned, which is to extend to Bristol, Tenn., 175 miles distant.

Denison, Texas—Street Railroad.—Work has been commenced on the street railroad previ-

ously reported to be constructed by Alexander Archeson and others.

Dover, Ga.—Railroad.—George P. Curry, of Augusta, confirms the report of last week that he has purchased a controlling interest in the Dover & Statesboro Railroad. It is also rumored that the railroad is to be extended to the Savannah river, a distance of 30 miles, and from Statesboro to Waycross, 90 miles distant.

Dunlap, Tenn.—Railroad.—The Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville) will, it is stated, construct the extension previously rumored of the Jasper branch to Pikeville.

Ellijott City, Md.—Railroad.—It is stated that surveys will soon be commenced on the Baltimore branch of the proposed Gettysburg & Washington Railroad, previously referred to.

Fort Payne, Ala.—Dummy Railroad.—A dummy railroad is reported as to be built to Crystal Lake. The Crystal Lake Land Co. can give information.

Grafton, W. Va.—Railroad.—Work has commenced changing the Grafton & Greenbrier Railroad, lately reported, from narrow to standard gauge.

Greensboro, N. C.—Street Railroad.—R. R. King has applied for permission to construct a street railroad.

Hawkinsville, Ga.—Railroad.—Gress & Haden, of Atlanta, are reported as organizing a company to construct a railroad to Douglas, about 65 miles distant.

Henrietta, Texas—Surveys will soon begin on the proposed Henrietta, Jacksboro & Gulf Railroad, mentioned last week, to extend to Jacksboro. The Henrietta, Jacksboro & Gulf Railroad Co. has consolidated with the Gulf, Brazos Valley & Pacific Railroad Co., and the name of the former company changed to that of the latter. The latter company has completed its organization with a capital stock of \$500,000. C. W. White, W. H. Ross, A. J. Douglass, W. B. Wortham, G. B. Gurney, H. D. White and A. G. Gurley, of Waco, and H. M. Taylor, of Weatherford are the corporators.

Houston, Texas—Railroad Bridge.—The International & Great Northern Railroad Co. (office, Palestine) will, it is reported, erect a 50-foot iron bridge.

Ironaton, Ala.—Railroad.—The East Tennessee, Virginia & Georgia Railway Co. (office, Knoxville, Tenn.) contemplates the construction of a 4-mile branch from its main line to Ironaton. Surveys are said to have been completed.

La Grange, Texas—Railroad Bridge.—The San Antonio & Aransas Pass Railway Co. (office, San Antonio) will build an iron bridge over Buckner creek.

Lake City, Fla.—Railroad.—A railroad is projected to Eutis via Hampton and Keuka, a distance of about 110 miles. It is said that it will be built by Chicago (Ill.) parties.

Lake City, Fla.—Railroad.—The correct name of the Lake City & Tampa Railroad Co., previously mentioned as incorporated, is the Brunswick, Lake City & Tampa Railroad Co., and the company contemplates the construction of a railroad from Brunswick, Ga., to Tampa.

Laney, Ala.—Railroad.—The Laney-Jackson Lumber & Railroad Co. expects to extend its road from Laney to Piedmont.*

Little Rock, Ark.—Belt Railroad.—Surveys have commenced on the Little Rock Belt Railroad, recently mentioned.

Martinsville, Va.—Railroad.—The Virginia & Carolina Construction Co. has decided, it is stated, to accept the proposition of the Roanoke & Southern Railroad Co. to construct that part of the Roanoke & Southern Railroad between Martinsville and Roanoke.

McDonough, Ga.—Railroad.—It is reported that the Georgia Midland & Gulf Railroad Co. (office, Columbus) will extend its road to Athens at once.

Mebane, N. C.—Railroad.—Thompson township has voted \$15,000 to the Danville, Mebane & Southern Railroad Co., previously reported.

Melrose, Fla.—Railroad.—It is reported that the Georgia Southern & Florida Railroad Co. (office, Macon, Ga.) intends constructing a branch railroad about 50 miles in length from a point 4 miles east of Melrose via Melrose, Rochelle and Micayon to a connection with the Tampa, Tallahassee & Western Railroad, previously reported, at Trenton.

Memphis, Tenn.—Railroad.—It is rumored that the Louisville, New Orleans & Texas Railroad Co., whose line extends to New Orleans, a distance of 450 miles, will double-track its road.

Mooresville, N. C.—Railroad.—It is reported that the Richmond & Danville Railroad Co. (office, Richmond, Va.) is surveying a railroad to Elmwood.

Murfreesboro, N. C.—Tram-road.—R. B. White will build a tram-road.

Newcomb, Tenn.—Railroad.—The Southern Fellico Coal Co. will, it is stated, begin shortly constructing the railroad recently referred to, to extend to Fellico, a distance of about 5 miles.

Parkersburg, W. Va.—Street Railroad.—The Park City Street Railway Co., previously reported as to extend its road, is considering the adoption of electricity as motive power.

Roanoke, Va.—Contracts for the extension of the Norfolk & Western Railroad from Elkhorn, W. Va., to Ironton, O., have been let as follows:

For sections 1 to 10 to Samuel Walton, Falls Mills, Va., to be completed by December 15, 1891; sections 11 to 30 also to Samuel Walton, to be completed by February 15, 1891; sections 31 to 40 to E. S. Moorman & Co., of Lynchburg, by January 15, 1891; also for sections 41 to 50, by February 15, 1891; sections 51 to 60 to E. & J. Purcell, White Post, Va., by March 15, 1891; sections 61 to 70 to E. A. Tennis, Cape May, N. J., by April 15, 1891; sections 71 to 80 to Beckwith, Quackenbush & Co., Washington, D. C., by April 15, 1891; also for sections 81 to 100, by May 15, 1891; sections 101 to 120 to Ryan & Kemple, Wheeling, W. Va., by June 1, 1891; sections 121 to 130 to Mason, Gooch & Hoge, Frankfort, Ky., by June 1, 1891; sections 131 to 139 to Mason, Gooch & Pinehart, Frankfort, Ky., by April 15, 1891; sections 141 to 150 to E. S. Whitney, Phillipburg, N. J., by January 15, 1891; for the 3,100-foot tunnel, to Mason, Gooch & Hoge Co., Frankfort, Ky. The remainder of the contracts have not been let yet.

Rochelle, Fla.—Railroad.—Surveys have been made for the proposed railroad recently mentioned to Melrose. W. B. Phifer can give information.

Rockville, Md.—Electrical Railroad.—A company has been incorporated by John E. Beall, Frank Walsh, H. B. Davidson, Spencer Watkins and others for the purpose of building an electrical railroad to Tennytown, D. C., about 10 miles distant.

Rockwood, Tenn.—Street Railroad.—Charter has been obtained for a company with capital stock of \$50,000 to construct a street railroad to Harriman via Cardiff, about 10 miles distant. H. H. Squier is president.

Stuttgart, Ark.—Street Railroad.—The Stuttgart Improvement Co., mentioned elsewhere in this issue, has secured permission to construct a street railroad.

Tazewell, Tenn.—Dummy Railroad.—The business men will build the dummy railroad lately mentioned, to be 1½ miles long. Necessary machinery and equipment will be purchased. J. C. Carr can give information.

Texarkana, Ark.—Railroad.—The Texarkana & Fort Smith Railroad Co. is reported to have sold bonds amounting to \$4,000,000 to secure the completion of the road to Fort Smith. It is said that work will begin at once.

Troy, Ala.—Railroad.—It is reported that the Central Railroad & Banking Co. of Georgia (office, Savannah, Ga.) will extend the Mobile & Girard Railroad to Flomaton, 90 miles distant.

Waco, Texas.—Dummy Railroad.—The Waco Dummy Street Railway Co. has been organized by J. E. Parker, J. W. Johnson, John Sleeper, L. B. Dougherty and others; capital stock, \$100,000. Charter has been filed.

Walterboro, S. C.—The Walterboro Construction Co. has been incorporated with a capital stock of \$10,000 for the purpose of constructing railroads, tram-roads, wharves, bridges, etc. R. C. Barkley, W. Stewart and Wm. Gregg, of Charleston; J. J. Cummings, D. C. Wilson and George Waterhouse, of Beaufort; J. R. Stokes, Wm. I. Stokes and A. Wichman, of Walterboro, and Alfred Aldrich, of Barnwell, are the incorporators.

Washington, Ga.—Dummy Railroad.—A dummy railroad is projected to Lincolnton, a distance of about 20 miles.

Wichita Falls, Texas—Street Railroad.—Joseph A. Kemp has secured the franchise for constructing the street railroad recently referred to, and it is believed that he will commence construction shortly.

Wilmington, N. C.—Railroad.—Track-laying will commence shortly on the Wilmington, Onslow & East Carolina Railroad, lately mentioned, which is projected to Jacksonville, N. C., 50 miles distant. H. A. Whiting, Wilmington, can give information.

RICHMOND, Ky., March 7, 1890.—The Rich Patch Iron Co., of Virginia, in which the individual members of our firm are largely interested, owns, we suppose, beyond question the most valuable tract of ore land in the State of Virginia. The Chesapeake & Ohio Railroad skirts it for almost its entire length; the extension of the Low Moor Iron Co.'s Railroad for about two miles will give an outlet from the heart of the property to the Low Moor furnaces, while the construction of the Potts Creek Railroad, a contemplated branch of the Chesapeake & Ohio system from Covington, Va., will tap the back end of the property, making the entire tract accessible to the ore markets of the States. The company who propose to open up and mine this ore is a company that has been engaged in the business formerly, is possessed of ample means, and will have operations begun within a very short period.

D. SHANAHAN & CO.

Southern Financial News.**NEW BANKS.**

Atlanta, Ga.—It is said that the Traders' Bank, the American Banking & Trust Co., both of Atlanta, and a banking corporation of Gainesville, will consolidate under the name of the Traders' Bank with capital stock of \$300,000.

Austin, Texas.—A new national bank with a capital of \$100,000 is being formed; \$80,000 has been secured.

Bel Air, Md.—The Bel Air Trust, Insurance & Security Co. has been organized by H. W. Archer, John S. Young, Frank E. Gorrell and others. Capital stock is \$100,000.

Bel Air, Md.—The Loan, Trust, Security & Insurance Co. has been organized by S. A. Williams, T. H. Robinson, John A. Russell and others. Capital stock \$100,000.

Cameron, Texas.—The First National Bank has determined to increase its capital stock from \$50,000 to \$75,000.

Collierville.—The Collierville Bank, previously referred to, has been opened with J. T. Briggs, president, and J. L. Granberry, cashier.

Cordelle, Ga.—Charter has been applied for organizing the National Guaranty Co. by D. J. McRae, George M. McMillan, W. W. Shipp and others.

Elkins, W. Va.—It is said that a national bank will be organized.

Georgetown, Texas.—Ernseney Taylor has applied for permission to organize the First National Bank, previously mentioned.

Hempstead, Texas.—The organization of a national bank is being talked of.

Laredo, Texas.—The Rio Grande National Bank intends increasing its capital from \$100,000 to \$250,000.

Laurel, Md.—C. H. Stanley and others have filed an application with the U. S. comptroller of the currency for authority to organize a national bank.

Leitchfield, Ky.—A bank is being organized. Charter has been applied for.

Liberty, Va.—The First National Bank of Bedford City will shortly be opened.

Lynchburg, Va.—The Virginia Investment Co. has been reorganized with a capital stock of \$50,000. James Hancock, Jr., is president.

New Orleans, La.—It is said that Texas parties will organize a bank with a capital of \$500,000.

Rusk, Texas.—Charter for a national bank has been obtained. T. C. Moore can give information.

Senatobia, Miss.—A bank is said to be contemplated.

Snow Hill, Md.—The Home Title & Trust, of Worcester county, has been incorporated with a capital stock of \$100,000 by George W. Purnell, William S. Wilson, O. D. Collins and others.

Sylacauga, Ala.—A national bank with \$50,000 capital is contemplated.

Vernon, Texas.—J. Walker, of Centreville, Tenn., has applied for authority to organize the Commercial National Bank of Vernon.

Waco, Texas.—The Waco Savings Bank has been incorporated with a capital stock of \$100,000 by Samuel Sanger, C. M. Soley, Eugene Williams and others.

Warren, Ark.—The Merchants' & Planters' Bank, recently rumored, has been organized with a capital of \$25,000. W. H. Wheeler is president, and J. J. Adair, cashier.

Washington, D. C.—The Lincoln National Bank has been authorized to commence business with a capital of \$200,000. John A. Prescott is president, and Frederick A. Stier, cashier.

Austell, Ga., will hold an election on March 29 to ascertain whether the town will issue the bonds lately mentioned to the amount of \$2,000, for the purpose of building a schoolhouse.

A mortgage has been filed for record from the Brush Electric Co., of Baltimore, Md., to the Safe Deposit & Trust Co., of the same city, to secure the issue of \$200,000 of 5 per cent. bonds.

B. A. Thompson, mayor, Birmingham, Ala., will receive proposals until April 1 for the purchase of \$200,000 of 5 per cent. 30-year public improvement bonds.

Bristol, Tenn., has voted to appropriate \$40,000 to aid in the construction of the Bristol, Elizabethton & North Carolina Railroad. Bonds are to be issued.

Camden, S. C., will issue \$7,500 of bonds payable March 15, 1900, and \$7,500 of bonds payable March 15, 1905, to retire bonds issued for the erection of an opera-house.

Charles county, Md., has asked for permission to issue 5 per cent. bonds to pay off present bonded indebtedness.

Charlotte, N. C., will probably hold an election to consider the issuance of \$75,000 of bonds. The mayor can give information.

Elkins, W. Va., is talking of issuing \$20,000 to

\$30,000 of bonds for street improvements. The mayor can give information.

Fort Payne, Ala., is reported to have placed the \$50,000 of 10-year 6 per cent. city bonds lately issued.

Fort Worth, Texas.—The Farmers' & Mechanics' Bank has declared a quarterly dividend of 3 per cent. The bank has decided to increase its capital stock from \$650,000 to \$750,000.

Georgia is preparing to issue negotiable bonds of the State for such amount of public debt, falling due October 1, as will not be paid by sinking fund, etc.; interest of the bond will not exceed 4 1/2 per cent.

Harlan county, Ky., has applied for permission to issue bonds to provide for the erection of a jail.

It is reported that the Texarkana & Fort Smith Railroad Co., (office Texarkana, Ark.) has placed bonds to the amount of \$4,000,000 to secure the completion of its road.

Newport, Ky., will redeem \$15,000 of 5 per cent. 20-year bonds issued July, 1883.

Newport, Ky., has asked the legislature for permission to issue bonds for street improvements.

Stanford, Ky., will hold an election on April 5 to consider the issuance of \$20,000 of bonds to provide for the construction for water works.

The Commercial Bank & Trust Co., Palaski, Tenn., has declared a dividend of 6 per cent.

The Troy (Ala.) Water Supply Co. will hold a meeting on March 21 at its office, 11 Wall street, New York city, to consider the issuance of bonds.

The Birmingham, Powderly & Bessemer Railroad Co. will hold stockholders' meeting at Birmingham, Ala., on April 2, for the purpose of considering as to issuing \$50,000 of bonds.

The Charleston & Savannah Railway Co. (office Charleston, S. C.) has declared a 2 per cent. dividend on first preferred income bonds.

The Carrollton Hotel, Baltimore, Md., has paid a dividend of 6 per cent. on preferred stock, due for 1878.

The Crescent Jute Manufacturing Co., New Orleans, La., has declared a dividend of 8 per cent.

The Eutaw Savings Bank, Baltimore, Md., has declared an extra dividend of 1 per cent.

Trenton, Tenn., has asked for permission to issue 6 per cent. bonds not to exceed \$30,000 for the purpose of erecting water works.

Wilson county, Texas, contemplates issuing \$8,000 of bonds to pay off indebtedness acquired prior to January 1, 1889.

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*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston—Foundry and Implement Factory.—J. H. Gill, of Raleigh, N. C., has arranged for the removal of his iron foundry and agricultural implement factory, previously reported, to Anniston.

Apple Grove—Saw Mill.—D. W. Draper will probably erect a saw mill.

Ball Play—Saw Mill.—J. C. McDaniel will erect a new saw mill and put in spoke machinery.

Bayou Labatre—Planing Mill.—Elliott & Carl contemplate erecting a planing mill.

Bermuda—Saw Mill.—L. W. Brantley & Sons have erected a saw mill at Bath.

Bessemer—Car Works.—It is reported that the car works previously mentioned will be built at a cost of \$1,500,000. The Bessemer Land & Improvement Co. can give information if true.

Bessemer—Foundry.—G. W. Beggs & Bro are enlarging their plant by the addition of a brass foundry.

Bexar—Saw Mill and Gin.—J. M. and W. M. Pearce have erected a saw mill and cotton gin.

Birmingham—Planing Mill.—The Birmingham Lumber Co. contemplates, it is stated, erecting a planing mill.

Calera—Iron Foundry.—The Calera Iron Foundry is being repaired.

Centre—Cotton Mill.—It is rumored that a \$50,000 cotton mill will be erected.

Clayton—Furniture Factory.—A furniture factory is reported as probably to be erected.

Decatur—Planing Mill.—The Bethard Manufacturing Co. will put some new machinery in its planing mill.

De Sotoville—Grist Mill.—Brown & Redgood are reported as to erect a grist mill.

Fort Payne—Iron Mine.—The Fort Payne Coal & Iron Co. will probably develop a new vein of iron ore recently opened on its property.

Fort Payne—Water Works, Sewerage System, etc.—The Crystal Lake Land Co., recently mentioned, will, it is reported, lay off into town lots 420 acres of land, construct a sewerage system and probably establish water works.

Gadsden—Cotton Factory.—T. F. Weaver, of Collinsville, is reported as organizing a stock company to establish a cotton factory in Gadsden.

Gadsden—Quarries.—W. F. Smith, of Birmingham, does not intend developing the limestone quarries lately mentioned at present.

Greenville—Cotton Mill.—The Muscogee Manufacturing Co., of Columbus, Ga., has, it is reported, made a proposition to erect a cotton mill.

Lancay—Iron Mines.—The Laney-Jackson Lumber & Railroad Co. expects to soon develop the iron mines mentioned in last issue.*

Mentone—Mining.—E. Mason is organizing a stock company to be known as the Mentone Mining Co. to develop silver and other minerals. The capital stock is to be \$200,000.

Mobile—Paving.—It is proposed to pave Government street at a cost of about \$40,000. The mayor can give information.

Mobile—Lumber Mill.—Darnell & Son are putting new machinery in their lumber mill.

Mountain Mills—Cotton Mill.—W. H. Cherry & Co. contemplate enlarging their cotton mill.

New Market—Saw Mill.—Trotter, Brown & Lamar will, it is stated, start a saw mill.

Opelika—Electric-light Plant.—W. C. Harris, of Atlanta, Ga., has organized the Opelika Electric Light & Power Co. to erect the electric-light plant for which he obtained franchise, as lately stated. The capital stock is \$5,500.

Oxford—Bridge.—An appropriation has been made for the construction of a bridge over Snow's creek, east of Oxford. J. T. De Arman can give information.

Oxford—Woolen Mill.—It is reported that a party has offered to locate a woolen mill to cost \$20,000 at Oxford provided the citizens raise \$10,000 of that amount.

Sheffield—Ice Factory.—The Sheffield Ice Factory is reported as to be enlarged.

Shelby—Water Works.—It is reported that water works will be established.

Stockton—Lumber Mill.—McMillan & Sons have put shingle machinery in their lumber mill.

Talladega.—The Talladega Hardware Co., mentioned in last issue as to manufacture sash, doors and blinds, has only added a sales department for same.

Troy—Water Works.—The Troy Water Supply Co., lately mentioned as to operate water works, will hold a meeting on March 21 at 11 Wall street, New York city, to consider the issuance of bonds.

Tuscaloosa—Cotton Mill.—The Tuscaloosa Manufacturing Co. is reported as enlarging its cotton mill.

ARKANSAS.

Bear—Lead Mines.—Work will probably be resumed at the Lost Louisiana lead mines.

Bear—Concentrating Plant.—A Milwaukee (Wis.) party is investigating with a view to erecting a concentrating plant. George Watson, of Hot Springs, can give information.

Bentonville—Overall Factory.—It is reported that an overall factory will be started.

Dardanelle—Electric-light Plant.—It is reported that the Dardanelle Ice Co., which is erecting the ice factory lately mentioned, will put in an electric-light plant.

De Witt—Canning Factory.—The erection of a canning factory is projected.

Harrison—Saw and Planing Mill.—Ryan Bros. & Co. are reported as erecting a saw and planing mill.

Newport—Electric-light Plant.—L. Hirsch received the 20 years' franchise to erect and operate an electric-light and power plant, lately mentioned.

Pine Bluff—Car Shops.—The St. Louis, Arkansas & Texas Railroad Co. (office, St. Louis, Mo.), previously reported as considering the erection of car shops in Pine Bluff, offers to locate same if given a bonus of \$30,000.

Portia—Lumber Mill.—The North Arkansas Lumber Co. has purchased the band mill lately mentioned.

Stuttgart—Electric-light Plant and Water Works.—The Stuttgart Improvement Co. has been incorporated by F. M. Gillett, of New York city; T. H. Leslie, W. F. Durrell, A. H. Sackland and others to operate an electric-light plant and water works and manufacture brick, lumber and ice. The capital stock is \$150,000.

Traskwood—Saw Mill.—F. W. Lawfekter has purchased the additional machinery for his saw mill lately mentioned.

Van Buren—Foundry and Machine Shops.—It is reported that foundry and machine shops will be started.

Van Buren—Tobacco Factory.—A tobacco factory will probably be established on the co-operative plan.

Wilcocks—Zinc Mines.—McDowell & Keys are reported as developing zinc mines.

FLORIDA.

Archer—Box Factory.—Hester & Stewart will put wooden-box machinery in their saw mill.

Bagdad—Sash Factory.—New machinery will probably be put in the Bagdad sash factory.

Bartow—Fertilizer Factory, &c.—The company mentioned in last issue as formed by Bishop Bros., of Eustis, W. J. Emerson, E. W. Codington and others, has purchased 7,000 acres of phosphate land and will, it is stated, erect a fertilizer factory.

Bronson—Crate Factory.—Mr. Kauffman will, it is reported, locate an orange crate factory at or near Bronson.

Callahan—Pottery.—The erection of a pottery is talked of.

Citrus County—Phosphate Lands.—A New York city syndicate is reported as purchasing, through E. Scott, 640 acres of phosphate land from T. J. Small, of Lewiston, Me., at \$200 per acre.

Gainesville—Drainage.—Surveys are being made preparatory to draining Lake Alachua and reclaiming several thousand acres of land.

Gainesville—Furniture Factory.—D. E. Cooper, operating a saw mill, sash and blind factory, has, with others, incorporated the D. E. Cooper Furniture & Lumber Co. to manufacture furniture. The capital stock is \$75,000.

Jacksonville—Bridge.—The contract for the iron and wood work of the viaduct bridge, previously reported as to be built, has been let to the Groton Bridge Co., of Groton, N. Y., at \$39,171.

Leesburg—Cigar Factory.—A. B. Eurd, D. B. Campbell, Ernest Yager and others will incorporate a \$10,000 stock company to erect a cigar factory.

Leesburg—Canning Factory.—It is stated that D. C. W. Smith has purchased the Florida Produce Factory at \$1,400, and will operate a canning factory and wine distillery.

Lochloosa—Brick-yard.—A brick-yard will probably be started.

Milton—Saw Mill.—E. Campodonico is improving his saw mill and putting in new machinery.

Palatka—Tallow Factory.—Duane Bros. have put in machinery for the manufacture of tallow, lard and grease.

St. Augustine—Concrete Works.—The St. Augustine Improvement Co. is experimenting with a new mixture of concrete, and, if it is successful, will establish works for manufacturing same.*

Tavares—Box Factory.—A. T. Streets and J. S. Earman will establish an orange box factory.

GEORGIA.

Albany—Cotton Factory.—Ira G. Briggs, of Voluntown, Conn., previously reported as investigating the water-power at Albany, with a view to locating a cotton factory, offers to form a company to furnish half the required capital to erect a \$300,000 cotton factory if the citizens will secure the remainder.

Americus—Medicine Factory.—C. A. Bass, J. W. Jones, G. Bass and others have incorporated the International Medicine Co. to manufacture medicine. The capital stock is \$5,000.

Americus—Brick Works, &c.—The company mentioned in last issue as organized by P. C. Clegg, S. H. Hawkins, J. D. Shipp and others, to manufacture brick, has been incorporated as the Ocmulgee Brick Co., with a capital stock of \$25,000. It has also the privilege of manufacturing lumber. The company will establish the brick-yard on the Flint river at Cordele, lately mentioned, and another on the Ocmulgee river.*

Americus—Spoke and Hub Factory.—An Ohio party has submitted a proposition to W. L. Glessner to start a spoke and hub factory in Americus.

Atlanta—Car Works.—The West Point Terminal Co. has sold 27 acres of land to parties who will, it is reported, organize the Georgia Car Co. to erect car works. The Georgia Lumber Co. is said to be interested.

Augusta—Candy and Cracker Factory.—Daniel Sibley & Co. will, it is stated, enlarge their candy factory and add the manufacture of crackers.

Augusta.—J. B. Cummings, Patrick Walsh, E. R. Schneider and others have incorporated the Augusta Mutual Insurance Co. with a capital stock of \$100,000.

Austell—Coal Mines.—Atlanta parties leased the anthracite coal beds lately mentioned. W. W. Austell can give information.

Brunswick—Glass Works.—An Atlanta party is reported as investigating with a view to erecting glass works to cost \$75,000.

Buena Vista—Planing Mill.—J. G. Hillman will erect a planing mill.

Cave Springs—Iron Furnace.—It is reported that Mr. Lancaster, manager of the Talladega Iron & Steel Co., of Talladega, Ala., will build an iron furnace.

Cave Springs—Iron Furnace.—J. M. Cooper, of Atlanta, is reported as arranging for the building of an iron furnace by Northern parties.

Cement—Machine Shop.—The Howard Hydraulic Cement Co., previously reported as to put in new machinery, contemplates adding a machine shop.

Clinch Haven—Saw Mill, &c.—It is reported that an English syndicate will purchase the saw mill and land of Paxton & Mattox for \$175,000.

Columbus—Medicine Factory.—H. H. Epping, Sr., T. M. Foley, Tol Y. Crawford and others have incorporated the American Drug Co. with a capital of \$5,000 to manufacture drugs, medicines, chemicals, etc.

Columbus—Sash, Door and Blind Factory.—T. J. Dudley & Sons, lately mentioned as enlarging saw mill, have erected a two-story addition, 40x60 feet, to their sash factory, and are erecting a dry-kiln.*

Columbus—Gin Factory.—F. H. Lumus will move his gin factory to Columbus and increase capacity.

Columbus—Woolen Mill.—J. P. Kyle can probably give information on the woolen mill lately mentioned.

Concord—Variety Works.—The Concord Variety Works has been organized and is erecting factory. It is reported that it will also erect fertilizer factory.

Cordele—Variety Works.—It is reported that a company will be formed to establish variety works.

Cordele—Brick-yard.—The Ocmulgee Brick Co., of Americus, will establish the brick-yard lately mentioned as probably to be started on the Flint river by E. J. Smith and others.

Dalton—Iron Mines.—F. W. Marsh & Sons, of Atlanta, and J. F. Allison, of Cartersville, have purchased, it is reported, the Oredell and Van Devander property, including 1,400 acres of iron lands, located seven miles west of Dalton, and will develop at once.

Dawson—Furniture Factory.—F. A. Ruggles will probably form a \$35,000 company to erect a furniture factory.

Dawson—Water Works.—The cost of the water works mentioned last week as to be built by R. L. Bennett, of Philadelphia, Pa., will be \$50,000.

Douglasville—Iron Ore Lands.—The Red Mountain Iron Co. has been incorporated by J. R. Cole, J. S. James, C. C. Post and others with a capital stock of \$500,000. It controls several thousand acres of iron ore lands.

Douglasville—Iron Mines.—The Douglasville Mineral Land & Improvement Co., lately mentioned, is negotiating a lease of its iron ore lands, and, if negotiations fail, will probably develop the mines itself.

Duke—Planing Mill.—W. T. Lott & Co. will, it is stated, erect a planing mill.

Eastman—Fertilizer Factory.—A fertilizer factory is talked of.

East Point—Implement and Wagon Factory.—Blount & Bell will put new boiler, steam hammer and a setter and fitter in their implement and wagon factory.*

East Point—New Town.—B. M. Blount and others have organized a \$100,000 stock company and purchased 800 acres of land on the Atlantic & West Point Railroad, and will build the new town of Atlantic City, mentioned in last issue. Negotiations are pending for the location of several large factories.

Fort Gaines—Oil Mill and Fertilizer Factory.—The Farmers' Alliance contemplates erecting a cotton-seed oil mill and fertilizer factory.

Gainesville—Water Supply.—E. E. Dixon, H. H. Perry, A. W. Van Hoosier and others will probably form a company to erect a large wind-mill with a water tank to supply their houses.

Gainesville—Foundry and Machine Shop.—It is reported that a North Carolina party will put in operation the machine shops and foundry at Gainesville.

Gainesville—Cotton Compress.—It is rumored that a cotton compress will be erected.

Greensboro—Oil Mill and Fertilizer Factory.—The erection of a cotton-seed oil mill and fertilizer factory is projected.

Griffin—Canning Factory.—W. H. Hartnett, of Neale, is reported as to move his canning factory to Columbus and enlarge same.

Griffin—Cotton Compress.—A cotton compress will, it is reported, be erected.

Griffin—Water Works.—Parties are corresponding in reference to the construction of water works. The mayor can give information.

Hawkinsville—Shingle Mill.—J. S. Owens & Co. contemplate starting a shingle mill.

La Fayette—Pottery.—Kelley & Roberts will start the pottery lately mentioned.

Macon—Canning Factory.—Mr. Scroggy, of Ohio, has been investigating with a view to erecting a canning factory.

Macon—Car Works, &c.—It is reported that the Georgia Southern & Florida Railroad Co., lately mentioned as to probably erect car works, has purchased 226 acres of land near Macon as a site for same; also will lay off a new town.

Marshallville—Shingle Factory.—Ware & Niles are rebuilding their shingle factory, mentioned in last issue as burned.

Montezuma—Variety Works, &c.—J. E. De Vaughn is president, E. B. Lewis, vice-president, and C. A. Hamilton, secretary, of the Montezuma Investment Co., lately mentioned. The company will, it is stated, erect variety works and a sash, door and blind factory.

Oconee—Jug Factory.—W. A. Clotfellow has started a jug factory.

Quitman—Canning Factory.—The Quitman Canning Co. writes it does not intend enlarging its factory, mentioned in last issue, this season.

Savannah—Water Works.—The water committee have been instructed to secure estimates by March 19 of cost of a pump with a capacity for 10,000 gallons per day, changing the location of present pump, larger mains and a stand-pipe of at least 40 pounds pressure. The mayor can give information.

Savannah—Electric-light Plant.—The Brush Electric Light & Power Co. has let contract to the Westinghouse Electric Co. for a 750 incandescent light dynamo.

Savannah—Canning Factory.—Augustus Oemler and others will charter a company to plant and propagate oysters. It is intended to erect a canning factory as soon as the business warrants.

Sparta—Shoe Factory.—It is reported that a Boston (Mass.) party is investigating with a view to locate a shoe factory.

Suwancee—Gold Mine.—G. A. Dickey, of Bradford, Vt.; James West and D. P. Harris, of Fort Payne, Ala., have optioned the Harris gold mine of Boon, Baxter & Garmany.

Tallapoosa—Electric-light Plant.—The Vernon Electric Light & Power Co. will put in another dynamo.*

Washington—Cotton Compress.—The Washington Compress Co. is the name of the company mentioned in last issue as letting contract for the erection of a cotton compress. C. A. Alexander is president.

Washington—Foundry and Machine Shops.—The Washington Foundry & Manufacturing Co., lately mentioned, has let contract for the erection of a brick building to Simon Krouph.

Washington—The Washington Construction Co. has been incorporated.

Waycross—Planing Mill.—Albertson, Murphy & Co. will erect the planing mill mentioned in last issue, also dry-kiln.

Whitesburg—Oil Mill.—A cotton-seed oil mill is projected.

Whitney—Machine Shop.—E. P. Parkins has, it is reported, started a machine shop.

KENTUCKY.

Barbourville—Grading.—D. J. Conger, of New Albany, Ind., has contract for grading for the Barbourville Land & Improvement Co. lately mentioned. The company will, it is stated, macadamize 5 miles of streets at a cost of \$13,000 per mile.

Bruce—Gas Well.—C. C. Conroy will sink a gas well.

Bullittsville—Steam Laundry.—Edward Stephens contemplates establishing a steam laundry.

Burkesville—Flour Mill.—Williams & Ritchey have erected the 50-barrel flour mill previously mentioned.

Burkesville—Oil Wells.—J. N. Brown, of Cincinnati, Ohio, is sinking an oil well.

Covington—Starch Factories.—The National Starch Co., lately mentioned as incorporated, is a consolidation of the management of a number of starch factories.

Covington—Cotton Factory.—It is reported that a cotton factory will be built.

Covington—Distillery.—The Home Rule Bitters Co. has been incorporated by Howard Douglass, Louis C. Strauss and E. B. Hunt to manufacture bitters, wines, &c. The capital stock is \$5,000.

Covington—The Homedale Lot Co. has been incorporated with a capital stock of \$100,000.

Covington—Soap Factory.—The Anchor Soap Works has been incorporated with H. H. Coombes, president; W. H. Dobell, vice-president, and W. R. Cooke, secretary, to manufacture soap. The capital stock is \$20,000.

Frankfort—Mining, etc.—The Morgan County Cannel Coal, Land & Lumber Co. has been incorporated by E. P. Bryan, John Meagher, Newton Abrahams and others, to deal in and develop mineral lands. The capital stock is \$200,000.

Frankfort—Electric-light Plant.—A bill has been introduced in the legislature to incorporate the Paragon Electric Co., Fayette Land Co., and the Kentucky Southern Oil & Gas Co.

Franklin—Creamery.—Fehr & Bro. have started the creamery previously reported.

Glasgow—Electric-light Plant.—A Cincinnati (O.) electric-light company, represented by Mr. Hous, has made a proposition to erect an electric-light plant.

Glasgow—Marble Works.—J. W. Dearing will erect a new building for his marble works.

Lexington—Electric-light Plant.—Contract has been let, it is stated, to the Westinghouse Electric Co. for a 3,000 incandescent electric-light plant.

Lexington—Land.—The Clifton Heights Land Co. has been incorporated with Louis Strauss, president; M. C. Alford, vice-president, and Charles Serlbach, secretary. It has purchased 106 acres of land near Lexington for \$66,000 and will improve.

Louisville—Lumber Mill.—The Louisville veneer Mills Co. has been incorporated by D. E. Kline, Jr., J. H. Venn and J. C. Parker with a capital of \$100,000 to manufacture veneers, lumber, &c.

Louisville—Harness Factory, Tannery, etc.—The Kreiger-Fischer Saddlery Co. has been incorporated by C. Stege, J. L. Kreiger and John Fischer for the manufacture of saddles, harness, collars and tanning. The capital stock is \$100,000.

Louisville—Brick Works.—The incorporators of the Lion Pressure Brick Co., lately mentioned, are J. M. Conway, A. Hillenbrand, W. H. Slaughter and J. R. Phelan. The capital stock is \$50,000.

Mayaville—Soap Factory.—It is reported that a stock company has been formed to establish the soap factory lately mentioned.

Mt. Sterling—Plow Factory.—A stock company is reported as organized to start plow factory.

Newport—Paving.—A bill has been introduced in the legislature at Frankfort to authorize the city to issue bonds for reconstruction of streets.

Newport—Piano Factory.—Herman, Ferdinand and G. H. Lindeman have incorporated the Lindeman Piano Co., to manufacture and sell pianos. The capital stock is \$10,000.

Owensboro—Gas Well.—The Pioneer Gas Co. has let contract for sinking another gas well.

Owensboro—Coal and Iron Mines etc.—The Owensboro, Falls of Rough & Green River Railroad Co. is now opening or will open along its line coal and iron mines, stone quarries and clay beds, and will build coke ovens this spring or summer.

Owenton—Electric-light Plant.—The Owenton Electric Light Co. has been organized with L. A. Cox, president, and E. Orr, secretary, to erect the electric-light plant lately mentioned.

Paducah—Barrel-hoop Factory.—A barrel-hoop factory has been started.

Pineville—Coke Ovens.—The Bell County Coke & Improvement Co., mentioned last week as organized to build 100 coke ovens, has been incorporated by Vincent Boreing, J. T. Ritchey, W. T. Tarnou and others with a capital stock of \$400,000. It has authority also to operate electric-light and gas works, factories, etc.

Pineville—Electric-light Plant.—The Pineville Electric Lighting Co., mentioned last week as having awarded contract for the erection of an electric-light plant, has been incorporated by J. S. Ray, Frank Marimon, J. T. Ritchey and others with a capital stock of \$25,000.

Pineville—Ice Factory.—The Pine Mountain Spring Water Ice Co., mentioned in last issue, has been incorporated by J. M. Unthank, Frank Marimon, J. B. Bowman and others with a capital of \$10,000.

Rankin—Flour Mill.—William Rankin & Son are changing their flour mill to the roller system.

Stanford—Water Works.—The city will hold an election on April 5th to determine upon the issuance of \$20,000 of bonds to construct the water works previously mentioned. The mayor can give information.

Tonieville—Barrel Factory.—The erection of a barrel and heading factory is talked of. W. M. Mitchell can give information.

Willard—Barrel and Keg Factory.—James Hoop writes that the barrel and keg factory lately mentioned will not be erected at present.

Winchester—Land.—The company mentioned in last issue as organized by John Garner and others has been incorporated as the Winchester Land & Investment Co., with Mr. Garner, president, and J. M. Hodges, secretary. The capital stock is \$50,000. It has purchased 63½ acres of land from William Timberlake and is laying off in lots.

Winchester—Tobacco Factory.—A bill has been introduced in the legislature at Frankfort to incorporate the Winchester Tobacco Co. This is probably the company mentioned last week as to erect tobacco factory.

Winchester—The Hall Place Co. has been incorporated with J. H. Evans, president; J. N. Cardwell, vice-president, and J. B. Ramsey, secretary, to deal in real estate. The capital stock is \$40,000.

Winchester—Land.—The Winchester Real Estate Co. has been incorporated with I. N. Cardwell, president; S. A. Conn, vice-president, and B. F. Curtis, secretary, to deal in real estate. The capital stock is \$20,000.

Winchester—Cotton Mill, &c.—It is reported that a cotton mill, a woolen mill and hemp factory will be established, and parties are looking for sites for furniture, wagon, spoke and handle and stave factories. S. A. Jeffries, secretary Commercial Club, can give information.

LOUISIANA.

Bayou Goula—Sugar Factory.—Maurice Hanlon has contracted for machinery outfit of a capacity of 50,000 pounds daily for a sugar factory.

Esterly—Rice Mill.—The erection of a rice mill is talked of.

Foster—Sugar-house.—S. M. Swenson has let contract for a 9-foot vacuum pan to be put in his sugar-house.

Franklin—Sugar Refinery.—John Sully and J. F. Braun, of New Orleans, are preparing plans for the central sugar factory of J. A. Morris, lately mentioned. It is to be a three-story building, 200 x 200 feet, lighted by electricity, and will contain two 2-roller mills and one 3-roller. The capacity is to be from 500 to 800 tons per day. Estimated cost is \$300,000. Leeds & Co., of New Orleans, have contract for machinery.

Jeanerette—Sugar-house.—A. L. Monnot will probably erect a triple effect at his sugar-house.

Jennings—Levee Work.—It is rumored that Mahaffy & Grear are negotiating for the construction of 10 miles of levee work.

Lake Charles—Ice Factory.—J. A. Landry has started an ice factory.

Lockport—Sugar-house.—C. Lagarde has let contract for a sugar mill for his sugar-house.

Logansport—Timber Land, &c.—Geo. W. Howell, of Atchison, Kans., mentioned last week, has purchased 100,000 acres of timber land, and will lay off a new town.

New Iberia—Syrup Factory.—Mrs. E. J. Cyr, G. W. Strawbridge and Don Louis contemplate erecting a six-roller mill for the manufacture of syrup.

New Orleans—Furniture Factory.—The New Orleans Coffin & Furniture Manufacturing Co., mentioned in last issue, will increase capital stock to \$60,000 and double capacity.

Thibodaux—Sugar-house.—Troisclair & Rochebeau have let contract for a sugar mill to be erected at their sugar-house.

Waggaman—Sugar-house.—Schmidt & Ziegler will put new machinery in their sugar-house.

MARYLAND.

Baltimore—Sugar Refinery.—The Baltimore Sugar Refinery Co., previously reported, has let contract to the Campbell-Zell Co. for six 250 horse-power boilers for its sugar refinery.

Baltimore—Motor Works.—The Baxter Electric Motor Co., lately mentioned, has secured a permit to build an addition to its works.

Baltimore—Ice Factory.—Thomas Sturgis and W. C. Lane, of New York, and O. Hammond, Jr., of Baltimore, have purchased an ice factory on Hooper's wharf, and will enlarge same, it is stated, to a capacity of 300 tons daily.

Baltimore—Gun Factory.—C. E. Sneidur, R. C. Hall, Edwin Warfield and others have incorporated the Sneidur Arms Co. of Baltimore with a capital stock of \$100,000, to manufacture firearms.

Baltimore—Canning Factories.—It is reported that an English syndicate will purchase a controlling interest in the canning and packing houses of Baltimore and operate them. Elbert Thomson can give information.

Baltimore—Electric-light Plant.—The Brush Electric Co. has issued \$200,000 of bonds.

Berlin—Coal Mine.—It is reported that a company is developing a coal mine.

Cambridge—Gas Works.—A bill has been introduced in the legislature authorizing the city to contract for gas works.

Cumberland—Rolling Mills.—The Cambria Iron Co., of Johnstown, Pa., has leased the Baltimore & Ohio Railroad Co.'s rolling mill and will operate same.

Hagerstown—Ice Factory.—The Hagerstown Ice Co., lately mentioned, has let contract for the erection of its factory.

Haight—Quarry.—It is reported that the flint quarry on Miss K. H. Bennett's farm will be developed.

Towson—Bridge.—The county commissioners will build a bridge, it is stated, across the Little Gunpowder river at Laurel Mills.

Union Bridge—Water Works.—The Union Bridge Water Co. has petitioned the legislature for authority to issue \$15,000 of bonds.

West Beaver Creek—Flour Mill.—L. P. Doub is considering the changing of his flour mill to the roller system.

Washington, D. C.—Land.—It is reported that a California syndicate has expended about \$1,500,000 in real estate, including the "Oak View" property, to deal in real estate and propose making extensive improvements.

Washington, D. C.—Land.—A. M. Bliss and H. A. Linger, representing a New York city syndicate, have optioned 230 acres of land east of Uniontown at \$150,000, and will, it is stated, if the sale is effected, lay off into lots and improve.

Washington, D. C.—Asphalt Works.—The Barber Asphalt Co. is rebuilding its works, and will put in new machinery, doubling capacity.

MISSISSIPPI.

Aberdeen—Mattress Factory.—A mattress factory has been started.

Gloster—Gin.—R. S. McLain will rebuild his cotton gin lately reported as burned.

Holly Springs—Spoke and Hub Factory.—The erection of a spoke and hub factory is projected. J. H. Bennett can give information.

Holly Springs—Knitting Mill.—Chase & Wynn have started the knitting mill lately mentioned.

Macon—New Industries.—It is reported that a \$125,000 stock company has been organized to build a cotton factory, an oil mill and two wood-working factories.

Meridian—Pottery, etc.—The Meridian Pottery & Manufacturing Co., lately mentioned as incorporated, will enlarge its pottery; also add machinery for the manufacture of sewer pipe, drain tiling, fire and pressed brick.*

Nettleton—Saw Mill.—Indiana parties have erected the saw mill, as lately stated.

Pass Christian—Artesian Wells.—The West End Artesian Well Co. has been organized with J. K. Long, president, and N. Butcher, secretary.

Summit—Cotton Mill.—The Summit Mills has been chartered with a capital stock of \$250,000 to

erect the cotton mill lately mentioned. The city authorities have been authorized by the legislature to subscribe \$20,000. B. Forcheimer can give information.

Wesson—Cotton Mill.—The Mississippi Mills is reported as to put new machinery in its cotton mill.

West Point—Cotton Gin Factory.—B. A. Smith & Son, of Rutherford, Tenn., mentioned in last issue, will move their cotton gin factory to West Point in November and increase capacity.*

Vazoo City—Foundry and Machine Shop.—A stock company has been organized to erect a foundry and machine shop. The Lintonia Land Co. can give information.

NORTH CAROLINA.

Archdale—Sash, Door and Blind Factory.—The Hammond Manufacturing Co. will put a planer and matcher in its sash, door and blind factory.

Asheville—Woodworking Factory.—The P. A. Demens Wood Work Co., operating a woodworking factory, has been incorporated. The capital stock is \$60,000.

Asheville—Cotton Mill.—The C. E. Graham Manufacturing Co., mentioned in last issue, has increased capital stock and will enlarge cotton mill as stated.

Asheville—Publishing, etc.—A. H. Fuller, T. W. Patton and T. A. Jones have incorporated the Asheville Citizen Publishing Co. to publish a newspaper and conduct a job printing and book-binding business. The capital stock is to be \$5,000.

Asheville—Shoe Factory.—The Asheville Shoe Co., mentioned in last issue, will enlarge its factory and put in some new machinery.*

Charlotte—Public Improvements.—The city will hold an election to decide upon the issuance of \$75,000 of bonds for street and other improvements. The mayor can give information.

Concord—Cotton Factory.—The establishment of another cotton factory is talked of.

Egypt—Cotton Mill.—It is reported that a company has been organized to build a cotton mill to cost \$75,000. The Egypt Land & Improvement Co. can give information.

Elizabeth City—Packing-houses.—It is reported that several oyster packing houses will be erected.

Elkin—Woolen Mill.—It is reported that a new woolen mill will be erected.

Flat Rock—Quarries.—Granite quarries will be developed, it is reported, as soon as the Flat Rock Railroad is finished.

Franklin—Saw Mill.—H. G. Trotter is erecting a saw mill.

Goldsboro—Saw Mill.—The Enterprise Lumber Co. has put a 150 horse-power engine in its saw mill.

Goldsboro—Paint Factory.—It is reported that a factory for the manufacture of fire-proof paint will be established. Major Grant can give information.

Goldsboro—Electric-light Plant.—The city has contracted with the Goldsboro Water, Gas & Electric Light Co. to supply the city with electric lights.

Greensboro—Shoe Factory.—The Tomlinson Manufacturing Co., of Archdale, will probably move their shoe factory to Greensboro.

Greensboro—Wagon Factory.—L. Trodson is organizing a \$30,000 stock company to start the wagon factory lately mentioned.

Greenville—Cotton Factory.—Efforts are being made to organize a stock company to establish a cotton factory.

Henderson—Water Works.—The contract for the water works lately mentioned has been let to J. L. Ludlow, of Winston, who represents a Northern company.

High Point—Spoke Factory.—S. Perry will erect the spoke factory mentioned in last issue.

High Point—Gold Mine.—A company will, it is reported, develop the Fentress gold mine near High Point.

High Point—Canning Factory.—The High Point Canning Co. has, it is stated, increased its capital stock and will enlarge its factory, erecting a new building.

Kenansville—Shingle Factory.—L. F. Pearsall contemplates putting in shingle machinery.

Leaksville—Coal Mines.—The Coal Mountain Mining Co., lately mentioned as incorporated, (under Lynchburg, Va.), is the company mentioned in issue of March 1 as organized to develop the coal lands between Leaksville and Walnut Cove.

Lexington—Brick-yard.—Watson & Cecil have moved their brick machinery from Concord to Lexington.

Lincolnton—Cotton Factory.—A stock company will probably be formed to operate the Elm Grove cotton factory lately mentioned.

Marion—Cotton Mill.—A \$100,000 stock company is being organized to build the cotton mill lately mentioned. J. H. Atkin can give particulars.

Maxton—Electric-light Plant.—Mr. Wright, of Greenville, is interested in the erection of the electric-light plant lately mentioned.

Monroe—Woolen Mill and Cotton Factory.—It is reported that a party has offered to remove his woolen mill and cotton factory to Monroe if satisfactory inducements are extended.

Moore County—Stone Quarry.—W. H. Smith has, it is stated, purchased a stone quarry and \$50,000 worth of machinery to develop same.

Morehead City—Saw Mill.—John Armstrong, of Pennsylvania, representing a company, has purchased land near the depot and will, it is reported, erect a saw mill to cost \$300,000.

Murphy—Furniture Factory.—The furniture factory lately mentioned will, it is reported, be erected by Mr. Kiser, of Pennsylvania, and Mr. Hobb, of Maine. It is stated that they have optioned a site on which to erect a \$20,000 plant.

Murphy—Lumber Mill.—Webster Young, of New York city, contemplates, it is stated, locating a large lumber mill in Murphy.

New Bern—Spoke and Handle Factory.—It is reported that an Indiana party contemplates moving his spoke and handle factory to New Bern.

Pine Bluff—Lumber Mill, etc.—The Pine Bluff Manufacturing Co. will put in a planer, matcher, band, jig, lathe and shingle saws; also a small electric-light plant.*

Raleigh—Tannery.—E. F. Wyatt & Son are reported as to establish the tannery mentioned in last issue.

Raleigh—Machine Shops.—It is reported that C. B. Park and C. B. Wood will establish machine shops.

Raleigh—Granite Quarry.—W. G. Upchurch will probably develop granite quarries.

Reidsville—Brick-yard.—J. W. McKoy contemplates starting a brick-yard.

Shelby—Cotton Mill.—R. B. Miller, Burwell Blanton and others, operating a cotton mill, have incorporated the Belmont Cotton Mills. The capital stock is \$60,000.

Troy—Land.—J. Littman and W. B. McCausless representing a syndicate, are prospecting with a view to purchasing from 30,000 to 50,000 acres of land for a German colony.

Wakulla—Saw Mill.—H. Wade & Co. will put a new boiler and engine in their saw mill mentioned in last issue (under Red Springs) as damaged by a boiler explosion.*

Winston—Cotton Factory.—Efforts are being made to organize a stock company to erect a cotton factory.

Winston—The Piedmont Land & Improvement Co.—has been organized, it is reported, by parties interested in the Roanoke & Southern Railroad Co. (office, Roanoke), with a capital stock of \$1,000,000.

Winston—Ice Factory.—It is stated that a 10-ton ice factory will be erected. S. H. Smith can give information.

SOUTH CAROLINA.

Barnwell—Grist Mill, Spoke Factory, &c.—The Enterprise Manufacturing Co. has been incorporated by R. S. Thompson, William McNab, A. T. Woodward and others to operate a grist mill, cotton gin and manufacture spokes, handles, wagons and buggies. The capital stock is \$10,000.

Charleston—Pants Factory.—The Southern Three Dollar Pants Co. has increased the capacity of its factory and added the manufacture of other clothing.

Charleston—Cotton Compress.—Neil Macdonald and A. Gallagher are negotiating to purchase the property of the Union Cotton Press & Wharf Co. for Northern parties, who will, it is stated, probably erect additional cotton compresses.

Columbia—Vinegar Works.—W. G. Murray and others are, it is stated, organizing a company for the establishment of a vinegar factory.

Florence—Brick & Tile Works.—Jerome P. Chase, R. C. Commander, J. E. Pettigrew and others have incorporated the Florence Brick & Tiling Co. to manufacture brick and tiling.

Florence—New Industries.—It is reported that a canning factory, a broom factory and a tobacco box factory will be established.

Georgetown—Lumber Mills.—F. A. Wilson, of Harrison, Mich., representing the Michigan parties mentioned in last issue as prospecting for the location of lumber mills, is negotiating for the Serenity plantation as a site.

Graham's Turn Out—Canning and Pickling Factory.—J. R. Calhoun is interested in the canning and pickling factory previously reported.

Greenville—Water Works.—The city council has adopted a resolution authorizing the electric-light committee to advertise for bids for the construction of a system of water works. E. F. S. Rowley, mayor, can give information.

Greenwood—Flour Mill.—J. W. Wells will, it is reported, erect a flour mill.

Laurens—Wagon Factory.—It is reported that C. T. Whiter will change location of his wagon factory and enlarge same.

Rock Hill—Canning Factory.—The capacity of the Davis Canning & Candy Factory will, it is stated, be increased.

Spartanburg—Brick-yard and Sash, Door and Blind Factory.—Alexander Long, R. Z. Cates, T. H. Cannon and others have incorporated the Morgan Manufacturing Co. to start a brick-yard and sash, door and blind factory.

Sumter—Machine Shop.—E. Skinner will, it is stated, establish the machine shop lately mentioned.

Varnville—Canning Factory.—W. L. Rents will, it is reported, start a canning factory.

TENNESSEE.

Athens—Furniture Factory, etc.—The Athens Furniture Co. writes that it does not intend putting new machinery in furniture factory mentioned in last issue.

Bradford—Saw Mill.—J. T. Cain & Son will probably put some new machinery in their saw mill.

Bradford—Felloe Factory.—J. E. Beck & Co. have added a felloe factory to their saw mill.

Bristol—Land.—A Philadelphia (Pa.) syndicate has purchased through William McGeorge, Jr., \$32,300 of lots.

Bryson—Flour Mill.—J. B. Morrell will, it is stated, put corn bolting machinery in his flour mill at Bethany.

Caney Spring—Saw Mill.—W. J. Thompson will erect a saw mill.

Carter's Creek—Flour Mill.—J. M. Hunter will rebuild his flour mill reported in this issue as burned.*

Chattanooga—Flour Mill.—The Reliance Milling Co. has been organized with a capital stock of \$100,000 to build a flour mill. C. P. Robertson, Box 46, is secretary and treasurer.*

Chattanooga—Foundry.—T. R. Evans will enlarge his iron foundry.

Chattanooga—Paving.—The contract for paving Whiteside street, previously reported, has, it is stated, been let to the Fort Payne Block Asphalt Paving Co., of Fort Payne, Ala.

Chattanooga—Bridge, etc.—The Chattanooga Land, Coal, Iron & Railway Co. has, it is reported, secured funds for the development of its property, including the construction of its steel bridge previously reported, and gas and water works.

Clarksville—Iron Furnace.—The Clarksville Iron Co. is reported as organized with F. P. Gracey, president, to build an iron furnace.

Cookeville—Saw Mill.—Terry & Slogle will erect a saw mill to be operated by a turbine water wheel.

Cookeville—Saw Mill.—John Madden will erect a saw mill.*

Couchville—Bridge.—The contract for building the bridge over Stones river, lately mentioned, has been let to the Youngstown Bridge Co., of Youngstown, O., at \$13,800.

Cowan—Iron Furnace.—The Tennessee Coal, Iron & Railroad Co., Nashville, has blown out its Swanee Furnace at Cowan for extensive repairs.

Dayton—Bridge.—Rhea county will probably build a bridge across Little Richland creek in the place of the one recently destroyed.

Dyer—Box Factory.—The Dyer Fruit Box Manufacturing Co. will probably put some new machinery in its factory.

Dyersburg—Electric-light Plant.—The erection of an electric-light plant is projected.

Eik Valley—Coal and Iron Mines.—It is reported that a company has been formed in Knoxville to develop coal and iron lands on the Knoxville & Ohio Railroad.

Erwin—Iron Mines.—Virginia parties are the purchasers of the Hannum iron property mentioned in last issue and are developing. T. C. Blair, P. O. Box 279, Roanoke, Va., can give particulars.

Greeneville—Tobacco Factory.—The J. R. Noel Tobacco Manufacturing Co. has purchased the smoking tobacco factory of Alexander & Howard, and will, it is stated, enlarge.

Harriman (P. O. Keathley)—Iron Mines.—The East Tennessee Land Co., previously reported as to develop iron mines, has appointed J. D. Roberts as superintendent, and will probably commence work at once.

Harriman (P. O. Keathley)—Electric-light Plant.—It is stated that contract has been let to the Thomson-Houston Electric Co. to erect the electric-light plant lately mentioned.

Harriman (P. O. Keathley)—Hardware Factory.—It is rumored that a hardware factory will be started at Harriman. The East Tennessee Land Co. can give information if true.

Island Mills—Saw and Grist Mill.—F. M. & S. J. Boy have erected a saw and grist mill near Island Mills.

Johnson City—Iron Furnaces.—A. Monroe, of Lawrence, Kans., representing a \$3,000,000 syndicate of that city, will, it is reported, purchase 10,000 acres of coal lands on the Charleston, Cincinnati & Chicago Railroad, also iron ore lands, develop same, and erect iron furnaces.

Keathley—Land.—Parties are reported as negotiating for the purchase of 1,350 acres of land for a town site from C. S. Barrett, J. H. Hutchins and others.

Knoxville—Water Works.—The Fountain Head Water Co. (E. Wolfman), which has contract to supply North and West Knoxville with water, as previously stated, will construct works on the stand-pipe system. The pumping capacity will be 3,000,000 gallons per 24 hours.

Knoxville—Lumber Mill.—Frank Hughes, S. W. Graves, C. E. Lemmon and others have incorporated the East Tennessee Lumber Co. for the manufacture and sale of lumber, sash, doors, blinds, etc.

Knoxville—Grading.—W. M. Baxter is president; A. J. Abler, vice-president, and W. B. Ragdale, secretary, of the Lonsdale Land Co., mentioned in last issue. It will, it is stated, expand \$72,000 in grading streets, etc.

Knoxville—Land.—Northern capitalists have purchased 16 acres of land from Feed & Woodward at \$16,000.

Knoxville—Land.—A New York party has, it is stated, optioned 60 acres of land at \$100,000.

Knoxville—Brick and Terra-cotta Works.—It is reported that a company will establish works for the manufacture of terra-cotta piping, drain tiles, etc., near Knoxville.

Knoxville—Tannery.—The Proctor Leather Co., of 131 South street, Boston, Mass., is the purchaser of the 40 acres of land lately mentioned as a site for a large tannery.

Knoxville—Marble Mill.—The marble mill of Beach & Co. will be added to the plant of the Phoenix Marble Co., which has been reorganized with a capital stock of \$30,000.

Loudon—Factory.—It is reported that negotiations are pending for the purchase of a site for a \$30,000 factory.

Morristown—Handle Factory.—A plow-stock factory is talked of.

Nashville—Stove and Tinware Factory.—The Phillips-Buttorff Manufacturing Co., manufacturer of stoves and tinware, has increased its capital stock \$50,000.

Rockwood—New Industries.—The Cardiff Town & Land Co. has, it is reported, secured through W. P. Rice sufficient foreign capital to increase its capital stock to \$5,000,000, and intends taking steps for the building of iron furnaces, rolling mill, bridge works, sheet metal works and other industries.

Trenton—Water Works.—T. J. Hoppell will receive proposals for constructing the water works previously reported at a cost of not more than \$50,000. The population is 2,000.

Union City—Planing Mill.—Rogers & Co. are erecting a planing mill and building material factory.

TEXAS.

Aransas City—Ice Factory.—E. G. Holden contemplates organizing a stock company to add a cold storage business to his ice factory. This is the ice factory lately mentioned as to be built.

Aransas City—Gins.—J. C. Fulton and J. E. Elgin, of Rockport, contemplate erecting cotton gins lately mentioned.

Brackettville—Water Works and Electric-light Plant.—The Haines, Brackett, Fort Clark & Rio Grande Railroad Co. will, it is reported, establish water works and an electric-light plant.

Cameron—Ice Factory.—A company has been organized to erect an ice plant.

Colmesneil—Furniture Factory.—It is reported that a furniture, sash, door and blind factory will be erected. The Yellow Pine Lumber Co. can give information.

Eagle Pass—Grist Mill and Gin.—J. W. Riddle is enlarging his grist mill and cotton gin at Fuentre.

Fort Worth—Paint Factory.—The Huffman Paint Co. has, it is stated, established a paint factory.

Fort Worth—Water Works and Sewerage System.—The city council has authorized the issuance of \$275,000 of bonds—\$150,000 for water works and \$125,000 for sewerage system—previously reported. The mayor can give particulars.

Fort Worth—Novelties Works.—The Lone Star Novelty Works (Allen & Shuman, of Kokomo, Ill.), previously reported as to begin work on its factory in March, has commenced the erection of a two-story brick building, 60x100 feet. It will manufacture sash, doors, blinds, etc.

Fort Worth—Machine Shop, etc.—The Texas & Pacific Railway Co. (office, Dallas) has, it is stated, let contract to J. P. Hughes, of Texarkana, for the erection of repair shop and a 14-stall roundhouse at an estimated total cost of \$20,000.

Fort Worth—Woolen Mill.—The Fort Worth Woolen Mills Co. has let contract for the erection of its woolen mill at Alamosa Heights, previously mentioned, to Remington & Van Zandt.

Fort Worth—Land.—H. B. Buck, of Springfield, Ill., has purchased 111 acres of land.

Galveston—Land.—The Galveston Land & Improvement Co., mentioned in last issue as incorporated, was organized by the Denver (Colo.) par-

ties recently reported as purchasing \$365,000 of land.

Galveston—Vinegar Factory.—The vinegar factory mentioned in last issue as established by Sonnenheil & Feist is operated by the Acme Vinegar & Pickle Works.*

Gilmer—Dry-kilns.—The Texas & Oklahoma Lumber Co. will rebuild its dry-kilns lately mentioned as burned.

Greenville—Oil Mill.—The erection of a cotton-seed oil mill is talked of.

Hale County—Land.—D. F. White, of Abilene, has purchased through Evans & Co., of Vernon, 18,000 acres of land at \$2.75 per acre.

Harrisburg—Pottery.—A pottery has, it is stated, been started.

Harrisburg—Brick-yard.—Coghlan Bros. and Milby, Don & Co. will start a brick-yard.

Harrisburg—Brick Works.—The Harrisburg Brick Works, lately mentioned, was chartered by Milby, Don & Co. and Milan Bros. & Matthews. The capital stock is \$30,000.

Hempstead—Bridges.—The county commissioners, mentioned lately, contemplate the erection of two iron bridges across the Brazos river.

Houston—Manufacturing.—The Texas Building & Manufacturing Co. has been incorporated with a capital of \$50,000.

Laredo—Furniture Factory.—Contract has been signed for the erection of a furniture factory. William Oliver can give information.

Laredo—Knitting, Woolen and Wool Scouring Mills.—T. G. McCulloh, president of the Kankakee Woolen Mill Co., of Kankakee, Ill., has signed contract to move the knitting, woolen and wool scouring mills lately mentioned to Laredo. Three hundred operatives will be employed.

Laredo—Coal Mines.—The Laredo Coal Co., lately mentioned, has let contract for a Diamond prospecting drill.

Laredo—Tannery.—E. A. Atlee, A. Urbahn, Allen Macdonnell and others have organized the Laredo Tannery & Leather Goods Co., to erect and operate the tannery previously reported and manufacture leather goods. The capital stock is \$100,000.

Marshall—Box Factory.—It is reported that a box factory will be established.

Navasota—Bagging Factory.—The Grimes County Farmers' Alliance contemplates erecting a cotton bagging factory. George D. Keith, of Keith, can give information.

New Braunfels—Flour Mill.—Peter Faust & Co. are putting a 100 horse-power turbine water wheel in their flour mill and cotton gin.

Pecos—J. J. Hagerman.—Louis H. Jackson, B. Eddy and others have incorporated the Pecos Land & Water Co. with a capital stock of \$300,000.

Queen City—Iron Furnace.—The Queen City Iron Mining & Smelting Co., previously reported as incorporated, will build the 100-ton iron furnace mentioned in last issue.*

San Antonio—Woodworking Factory.—A Philadelphia (Pa.) company has made a proposition to establish a woodworking factory. Mayor Callaghan can give information.

Sherman—The South Sherman Investment & Improvement Co.—has been organized.

Sipe Springs—Ginnery.—T. C. Yantis will erect the cotton ginnery lately mentioned.

Taylor—Machine Shop, etc.—It is rumored that the Missouri, Kansas & Texas Railroad Co. (office, Sedalia, Mo.) will erect machine shops and roundhouse in Taylor.

Taylor—Cotton Compress.—A cotton compress will probably be erected.

Terrell—Oil Mill.—It is proposed to organize a stock company to erect the cotton-seed oil mill lately mentioned. J. L. Serrell can give information.

Tyler—Saddlery.—Another saddlery and harness factory has, it is reported, been started.

Waco—Grist Mill and Cotton Gin.—A. H. Curtis, of Troy, will probably erect a grist mill and cotton gin at the new town of Lott.

Waco—Woolen Mills.—The Slayden-Kirksey Woolen Mills has amended its charter, increasing capital stock to \$200,000.

Waco—J. F. Walton, F. O. Rogers, J. V. Smith and others.—have incorporated the Proctor Springs Co. with a capital stock of \$60,000.

Weimar—Paint Factory, etc.—Armstrong & Co. are to erect the paint factory mentioned in last issue. They will also put in iron and woodworking machinery.*

Wills Point—Canning and Syrup Factory.—The Wills Point Canning Factory is reported as to be enlarged and machinery added for the manufacture of syrup from sugar-cane. N. A. Matthews can give information.

VIRGINIA.

Abingdon—Land.—Barker & Reynolds, of Bristol, Tenn., mentioned in last issue, have purchased \$25,000 of land at Damascus.

MANUFACTURERS' RECORD.

Alexandria—Telegraph Lines, &c.—The Inter-ocean Telegraph Co. has been incorporated with D. H. Bates, of New York city, president, and J. F. Hood, of Washington, D. C., secretary, to construct and operate telegraph and telephone lines. The capital stock is \$100,000.

Basic City—Iron Furnace.—The Herman Iron Co. contemplates building an iron furnace at some future date. Herman Becker, 610 Locust street, Philadelphia, Pa., can give particulars.

Basic City—Iron Furnace.—A 10-ton iron furnace will, it is reported, be built. The Basic City Mining, Manufacturing & Land Co. can give particulars.

Belfield—Butter-dish Factory.—A butter-dish and veneer factory is reported as to be started.

Berkley—Knitting Factories.—It is reported that two more knitting factories will be erected.

Berkley—Barrel Factory.—Parties have been prospecting with a view to locating a barrel factory.

Big Spring Depot—Electric-light Plant.—The Pittsburgh Development Co. will erect the electric-light plant mentioned in last issue at Carnegie City.*

Buena Vista—Mining and Manufacturing.—The Forest Land Co. has been incorporated with J. T. Dunlop, president, and R. R. Witt, secretary and treasurer, to do a mining and manufacturing business. It has purchased 140 acres of land of J. T. Dunlop at \$30,000, and 45 acres for \$7,000 of R. N. Tyree, and will improve same.

Buena Vista—Builders' Supply Factory.—Sistering & Drever, of Richmond, mentioned in last issue as purchasing a saw and planing mill, will erect a factory for the manufacture of builders' supplies.*

Buena Vista—Brick-yard.—Waddy & Jordan, of Greenville, previously reported as contemplating the establishment of a brick-yard, will begin work on their brick plant at once. The capacity will be from 20 M to 30 M bricks per day.

Buena Vista—Land.—T. B. Ferguson, B. E. Vaughan and S. H. Franklin have purchased, it is reported, \$20,000 of lots of the Buena Vista Co., and will improve.

Cedar Bluff—New Town, &c.—A. J. May, G. W. Gillespie, W. E. Perry, of Tazewell C. H., and others have formed a company, purchased 400 acres of land in the Richlands, and will, it is stated, lay off a new town and build water works. The capital stock is \$70,000.

Christiansburg—New Town, &c.—The Montgomery Land & Improvement Co. has been organized with Ridgeway Holt, of Yellow Sulphur Spring, president; W. A. Wilson, vice-president, and H. K. Tallant, secretary. It has purchased a tract of land, and will lay off a new town to be called "Huger City."

Courtland—New Factories.—Three new factories will, it is reported, be started.

Covington—Iron Mines.—A company has been organized by D. and C. M. Shanahan, of Louisville, Ky.; E. T. Powell, of Newport, Ky.; W. A. Kinehart and E. M. Nettleton to develop the iron ore lands of the Rich Patch Iron Co., reported in this issue.

Covington—Iron Furnaces and Mines.—The Rich Patch Iron Co. has been organized with D. Shanahan, of Louisville, Ky., president; J. Yost, of Iron Gate, vice-president, and E. M. Nettleton, secretary. It has purchased 9,300 acres of mineral land for \$50,000, and proposes developing and building iron furnaces. The capital stock is \$400,000.

Covington—Factories.—The Covington Improvement Co. has been chartered by R. L. Parish, A. A. McAllister, E. M. Nettleton and others to build a city and secure the location of factories.

Culpeper—Flour Mill.—The erection of a flour mill, to have a capacity of 60 barrels per day, is contemplated.

Danville—Machine Works.—Kasey & Co. may later on start works for the manufacture of their patent leaf tobacco caser.

Fincastle.—The Fincastle & Southern Botetourt Development Co., lately mentioned, has been organized with W. B. Simmons, president; L. Housman, Jr., vice-president, and George Swann, secretary.

Fincastle—Bottling Works.—G. B. McLane, of Roanoke, recently mentioned as purchasing the Fincastle Ferro-Magnesian Mineral Springs, will, it is stated, establish bottling works.

Franklin—Brick Works.—Williams & Jackson are erecting new buildings and otherwise improving their brick works.

Franklin—Artesian Well.—A company has been organized to sink an artesian well.

Fredericksburg—Gold Mine.—The Rappahannock Gold Mining Co. has purchased new machinery for its gold mines in Stafford county, near Fredericksburg.

Harrisonburg—Ochre and Umber Mines.—William Quigley, of Cleveland, O., has leased several tracts of land in Rockingham county containing umber and yellow ochre, and will probably erect mills to develop the same.

Harrisonburg—Flour Mill.—J. C. Beery, previously reported as to build a 125-barrel flour mill, has let contract for machinery.

Henrico County—Phosphate Mines.—A company has been organized, it is stated, to develop phosphate mines on Malvern Hill.

Iron Gate.—The name of the company lately mentioned as organized with J. P. Houck, president; J. G. Yancey, vice-president, and T. A. Long, secretary, is the Harrisonburg Iron Gate & Improvement Co.

Ivanhoe Furnace—Iron Mines.—The New River Mineral Co., mentioned in last issue, is opening its iron mine, and will put out 12,000 tons per annum. It will soon open its Gregory mine.

Jeffersonville—New Town, etc.—The McQuail Coal & Coke Co. has been organized with W. H. McQuail, president; W. T. Griffiths, vice-president, and F. P. Harman, secretary, to build a new town in Wise county to be called Virginia City. It has authority to mine coal, manufacture coke, build and operate furnaces, rolling mills, foundries, etc. The capital stock is to be not less than \$200,000 nor more than \$500,000. Principal office of company is Jeffersonville (postoffice, Tazewell C. H.)

Lexington—Bridges.—It is stated that bridges will be built across the North and James rivers at Glasgow. The Rockbridge Co. can give information.

Lexington—Electric-light Plant.—The erection of an electric-light plant at Glasgow is projected. The Rockbridge Co. can give particulars.

Lexington—Shoe Factory.—Lynn (Mass.) parties will, it is reported, move a shoe factory to Glasgow. The Rockbridge Co. can give information.

Lexington—Iron Furnace.—The Glenwood Furnace Co., reported in last issue as organized to build an iron furnace at Glasgow, will, it is stated, build two furnaces to cost between \$300,000 and \$350,000.

Lexington—Water Works.—Surveys are being made to supply Glasgow with water. M. M. Martin can give particulars.

Lexington—Land.—It is reported that a Charlottesville company has purchased \$25,000 of lots of the Glasgow Improvement Co., and will improve.

Lexington—Mineral and Timber Land.—The Rockbridge Co. is reported as purchasing a large tract of mineral and timber land for \$250,000.

Lexington—Land.—Micajah Woods and others have organized the Glasgow Construction & Improvement Co., purchased 200 lots at Glasgow and will improve.

Lexington.—A bill has been introduced in the legislature to incorporate the Glasgow manganese & Mineral Co.

Liberty—Steel Plant, etc.—A steel and iron plant and several other industries will, it is reported, be established. The Bedford City Land & Improvement Co. can probably give information if report is correct.

Liberty—Broom Factory.—A broom factory will be erected. The Bedford City Land & Improvement Co. can give information.

Liberty—New Industries.—The Bedford City Land & Improvement Co. is the company previously reported as to be organized to secure the location of new industries and the building of a hotel.

Liberty.—The Longwood Park Land & Improvement Co., lately mentioned as purchasing the Big Hill iron property, has commenced developing.

Love's Mills—Flour Mill.—Joseph Love will erect a flour mill.

Luray—Mineral Land.—D. F. Kagey, A. J. Brand, B. C. Rust and others have taken options upon several mineral properties in Page county, and will, it is reported, develop.

Lynchburg.—The Young Men's Investment Co. contemplates increasing its capital stock from \$30,000 to \$100,000.

Lynchburg—Zinc Mines and Works.—The charter, lately mentioned as granted the Washington Zinc Co., authorizes the manufacture of the by-products of zinc. The company will, it is stated, open new mines.

Lynchburg—Steel Plant.—The West Lynchburg Land Co. has offered inducements to the proprietors of the McCarthy process for making steel to locate its plant in Lynchburg.

Lynchburg—Cecil P. Poole will start the manufacture of electrical fuses, blocks and cut-outs, electric switches, arc lamps, etc.

Marion—Iron Mines.—The Staleys Creek Iron & Manganese Co. has been organized with A. C. Cummings, of Abingdon, president, and J. S. Apperson, secretary. It owns 5,000 acres of iron and manganese lands which it intends developing.

Marion.—It is reported that a land improvement company has been organized.

Milnes—Mining, etc.—The Shenandoah Mining & Land Improvement Co. has been organized to lay out a town, &c.

New Castle—Brick Works.—It is reported that a company will be organized to manufacture brick.

New Castle.—A. L. Boulware, of Richmond, is president; J. C. McDonald, vice-president, and William Connell, of Portsmouth, Ohio, secretary, of the Craig City Improvement Co., previously reported as incorporated. The capital stock is \$200,000.

Norfolk—Flour Mill—Lyman, Field & Co. have put additional machinery in their flour mill.

Oliver—Flour Mill.—C. H. Oliver, mentioned in last issue (under Hewlett's) as purchasing the "Rockets Mill" property, will put in machinery for a 25-barrel roller flour mill to be operated by water-power.*

Parkley—Factory.—The Everett Machinists' Metallic Pattern Letter Manufacturing Co., of Newark, N. J., will move its factory to Parkley, as stated in last issue.

Pulaski City—Iron Furnaces and Mines.—The Peak Knob Iron Co. and the Pulaski Development Co. have been organized to develop the Bohannon farm of 834 acres, recently mentioned, and will, it is stated, build one or more iron furnaces.

Radford—New Town.—The Radford Land Improvement Co. has purchased land opposite West Radford, and will, it is stated, lay off the same into a town to be called "Brooklyn."

Richmond—Ice Factory.—The Crystal Ice Co. has been incorporated with John Pope, president; T. Jeffries, vice-president, and C. D. Wingfield, secretary, for the manufacture of ice. The capital stock is \$50,000.

Roanoke.—A bill to incorporate the Vinton & Roanoke Light & Water Co. has passed the State Senate.

Roanoke—Iron Mine.—The Blue Ridge Mining & Development Co. will probably expend \$12,000 on the purchase of an iron mine and mining plant.

Roanoke.—The Creston Land Co., lately mentioned, will increase capital stock to \$60,000.

Roanoke.—The Exchange Building & Investment Co. has increased its capital stock \$5,000.

Roanoke—Cotton Mill.—Scott & Rives are organizing a stock company to build a cotton mill. \$20,000 have been subscribed.

Roanoke—Ice Factory.—The Diamond Ice Co. is adding a 10-ton machine to its factory.

Roanoke—Paper-bag Factory.—R. J. Eckloff is president; Charles Lyle, vice-president, and C. A. Hofiman, secretary, of the Old Dominion Paper Bag Co., mentioned in last issue as organized to manufacture paper bags. The capital stock is \$100,000.

Roanoke—Stove Works.—The organization of a company to establish stove works is again talked of.

Roanoke—Iron Furnace.—William Welch writes that the report mentioned in last issue that he had purchased land and would build an iron furnace is a mistake.

Roanoke—Flour Mill.—J. B. Garst & Bro. have a new water wheel and other machinery in their flour mill.

Salem—Land.—The Riverside Land Co. has been organized with W. E. Herbert, president, and C. Nininger, vice-president. The capital stock is \$150,000.

Salem—Land.—O. L. Stearnes, mentioned in last issue as optioning 200 acres of land, has with others organized the Creston Land Co. with G. F. Ligon, president; J. F. Christian, of Roanoke, vice-president, and G. W. Walker, secretary. The capital stock is \$200,000.

Salem.—The River Spring Land Co. has been organized with a capital stock of \$80,000.

Salem—Bridges.—The Salem Development Co. has let contract for the two iron bridges across the Roanoke river, lately mentioned, at \$16,500.

Staunton—Extract Works.—O. K. Lapham, of Chicago, Ill., has enlarged the capacity of his Staunton Extract Works.

Staunton—Land.—The West Staunton Land Co. has been incorporated with W. H. Weller, president; C. C. Berry, vice-president, and M. M. Robertson, general manager. It has purchased 60 acres of land of J. L. Peyton, and will lay off into lots and improve at a cost of \$20,000. The capital stock is \$75,000.

Taylorstown—Flour Mill.—A flour mill is being erected by J. S. House.

Tolersville—Land.—The Nitro-phosphate Co., of London, Eng., which will build chemical and fertilizer works at Norfolk as previously reported, has purchased land near Tolersville at \$75,000, and will, it is stated, lay off a new town. A. E. Bateman, of New York, can give information.

Tolersville—Mineral Land.—A company has purchased, through J. J. Porter, 479 acres of mineral land.

Waynesboro—Planing Mill.—M. R. Ellis, J. J. Coyner and A. M. Coyner will erect a planing mill.

Waynesboro—Brick-yard.—J. S. Myers will start a brick-yard.

West Point—Ice Factory.—The Artesian Ice Co. has been organized by parties interested in the preserving company recently mentioned to erect an ice factory.*

Winchester.—The Peale Coal & Iron Co. is reported as incorporated.

Wythe County—Iron Mine.—Hughes & Bramblett have purchased new machinery for their iron mine to increase daily output.

Wytheville—Soap Factory and Laundry.—H. W. Green contemplates erecting a soap factory and steam laundry.*

WEST VIRGINIA.

Addison—Land.—C. P. Dorr has purchased 5,300 acres of land in Webster county for \$31,986.

Alderson—Flour Mill.—J. C. Bright is reported as to erect a new roller flour mill.

Barboursville—Publishing.—The West Virginia Methodist Publishing Co. has been incorporated.

Braxton County.—The Pardee & Curtin Lumber Co. has been incorporated by George W. Curtin, of Grafton, and others to operate in Braxton county, with capital stock of \$500,000.

Burnings Springs—Oil Well.—Col. Roberts will sink an oil well.

Burnings Springs—Oil Well.—Krepps & Davis are sinking an oil well.

Cabell County—Gas and Oil Wells.—John Worthington, of Pittsburgh, Pa., has leased about 5,000 acres of gas and oil lands and will sink wells.

Charleston—Factory.—William Phillip's Sons are reported as enlarging their factory.

Elizabeth—Oil Wells.—The Augusta Oil Co., of Pittsburgh, has leased 800 acres of land and will sink oil wells.

Elizabeth—Oil Wells.—T. J. Vandegrift & Co., of Pittsburgh, have leased 1,500 acres of land and will sink oil wells.

Elkhorn—Coal Mines.—Several new companies are to be incorporated to develop coal mines. J. R. Greenawalt can give information.

Elkins—Street Improvements.—The city will probably issue \$20,000 or \$30,000 of bonds to improve streets. The mayor can give information.

Fairmont—Oil and Gas Wells.—The Jackson Oil & Gas Co. has been organized with T. M. Jackson, president, and A. L. Prichard, secretary.

Freeman's—Brick and Tile Works.—The American Fire Clay Co. has been incorporated with a capital stock of \$45,000 to manufacture fire-brick, sewer-pipe, etc.

Glenville—Flour Mill.—Whiting Bros. & Co. are reported as to build a new flour mill.

Huntington.—Alexander Wilson, of Middleport, Ohio, is reopening and will develop the Newcastle coal properties recently purchased by him.

McDowell County.—Marshall Watts, of Tazewell, C. H., Va., and H. Newberry are reported as purchasing coal lands.

Piedmont—Paper and Pulp Mill.—The Piedmont Pulp & Paper Co. is reported as to enlarge its mill.

Shenandoah Junction—Planing Mill, &c.—The erection of a planing mill and sash factory is projected.

Salem—Flour Mill.—Gordon, Boyer & Co. will, it is stated, erect a new flour mill.

St. Mary's—Oil Wells.—L. D. Thurston has leased 160 acres of oil land and intends sinking wells.

Thomas—Coke Ovens.—The Davis Coal & Coke Co. is reported as building 50 additional coke ovens.

Tunnelton—Coke Ovens.—The West End Coke Co. will probably build additional coke ovens.

Volcano—Gas Well.—R. M. Gatton is sinking a gas well.

Volcano—Gas Wells.—It is reported that the Royal Gas Co., of Philadelphia, Pa., has leased the Hibbs tract of land and will at once sink gas wells.

Weston—Flour Mill.—It is reported that J. W. Detamore will erect a flour mill.

Wheeling—Plate Glass Factory.—Steps are being taken to secure the establishment of a plate glass factory.

White Sulphur Springs—Pottery.—It is reported that a company has been organized to start a pottery.

BURNED.

Blackstone, Va.—The grist and flouring mill of Knight & Oliver.

Disputanta, Va.—The distillery of A. R. Webb, near Disputanta.

Hayrick, Texas.—The Coke county courthouse.

Melrose, Ga.—The moss factory and rice mill of Herberle Blake.

Hot Springs, Ark.—The hotel of Henley & Donnelly.

Covington, Ky.—The cigar factory of G. C. Broome.

Norfolk, Va.—Henry Parker's barrel factory and R. W. Stire's box and barrel factory.

Oakwood, Va.—John McKercher's mill near Oakwood; loss \$4,500.

Plaquemine, La.—The sugar-house on the Keep plantation.

Roberdell, N. C.—The stone dam at the cotton mill of the Roberdell Manufacturing Co. destroyed by freshet; loss \$5,000.

St. Joseph, La.—The saw mill of the Marydale Land & Lumber Co.

Washington, N. C.—The dry-kilns of E. M. Short.

Building Notes.

Albany, Ga.—Hobbs & Davis will, it is said, erect a two-story brick store and office building.

Archer, Texas.—Archer county intends erecting a \$40,000 courthouse.

Arcola, Miss.—A branch of the Southern Home Building & Loan Association has been organized with Jesse W. Atkinson, president.

Arkansas City, Ark.—Hotel.—T. Harding is preparing plans for the hotel previously reported to be erected by W. Bonner at a cost of \$30,000. The hotel is to be 100x150 feet in size.

Athens, Ga.—It is rumored that the Georgia Railroad & Banking Co. (office, Augusta), the Northeastern Railroad Co. and the Covington & Macon Railroad Co. (office, Macon) will erect a union depot.

Atlanta, Ga.—Alexander Doyle, of New York city, has secured the contract for the erection of the monument recently referred to, to the memory of the late Henry W. Grady.

Atlanta, Ga.—A bill is before the city council authorizing the erection of a fire-engine house to cost \$8,500.

Augusta, Ga.—David Gregg has contract for the erection of the warehouse of Bussey & Carswell and A. S. J. Gardner, his bid being \$5,441.

Augusta, Ga.—Hotel.—The Hotel Bon Air Co. is discussing the enlargement of the Hotel Bon Air or of erecting a new hotel.

Balcony Falls, Va.—Hotel.—The Rockbridge Co. (office, Lexington) intends, it is stated, erecting at once a \$60,000 hotel.

Ballinger, Texas.—J. G. Stutz intends erecting the opera-house mentioned last week. Cost will be about \$10,000.

Bamberg, S. C.—The erection of a cotton warehouse by the Farmers' Alliance is being talked of.

Barnesville, Ga.—The town has decided by popular vote to appropriate \$10,000 for the purpose of enlarging the Gordon Institute, lately mentioned.

Belton, Texas.—A company has been organized for the purpose of erecting a college. Contract is said to have been let.

Benwood, W. Va.—The Benwood Building & Loan Association has been organized with a capital stock of \$1,350, with privilege of increasing to \$75,000.

Berlin, Md.—Hotel.—It is said that a hotel will be erected by a hotel proprietor of Martinsburg, W. Va.

Birmingham, Ala.—It is reported that the Alabama Club will erect a club building during the coming summer.

Birmingham, Ala.—The Y. M. C. Association, lately referred to, is still undecided as to whether to erect a temporary building or a five or six-story stone structure.

Birmingham, Ala.—J. B. Francis will, it is stated, erect at once 7 two-story warehouses to cost \$25,000.

Birmingham, Ala.—It is said that the Southern Express Co. will erect a two story brick building 70x55 feet.

Birmingham, Ala.—Wm. A. Handley will, it is stated, erect 16 four story brick and stone store houses.

Bridgeport, Ala.—The Bridgeport Land & Improvement Co. will, it is stated, erect a bank and office building at once.

Bridgeport, Ala.—Hotel.—R. C. Johnston and others are talking of erecting a hotel to cost \$75,000.

Buena Vista, Va.—B. T. Bagby and W. F. Summerson, of Staunton, have contract for erecting 4 dwellings and 2 storehouses.

Camden, S. C.—A branch of the Southwestern Building & Loan Association has been organized with E. E. Sill, president.

Carrollton, Miss.—The Bank of Carrollton, lately reported as being organized, will erect a brick bank building. The First Baptist congregation will erect a brick church. Plans for both buildings by Chamberlin & McGeoy, Memphis, Tenn.

Cedar Bluff, Va.—Hotel, &c.—A company, mentioned elsewhere in this issue, has been organized by A. J. May, G. W. Gillespie, H. C. Alderson and others, of Tazewell, for the purpose of building a new town, erecting a hotel, etc., on land lately purchased in the "Richlands." The capital stock is \$50,000, which it is proposed to increase to \$70,000.

Charleston, S. C.—The Banking System Building & Loan Association has been incorporated with a capital stock of \$200,000 by Lee Loeb, J. M. Thomas, J. M. Connelly, H. A. Mullings and others.

Charleston, W. Va.—S. D. Cox contemplates erecting a three-story brick residence.

Chattanooga, Tenn.—Dr. W. A. Dietrick contemplates the erection of a sanitarium at Lookout mountain.

Chattanooga, Tenn.—Hotel.—C. A. Bedell, of Boston, Mass., will, it is stated, erect at once a hotel.

Chattanooga, Tenn.—A branch of the People's Building, Loan & Savings Association of Geneva, N. Y., has been organized with W. M. Wilhoite, president, and Henry N. Martin, secretary.

Chattanooga, Tenn.—J. Q. Adams is said to have closed contract for the erection of a stone and brick residence.

Chattanooga, Tenn.—The Chattanooga Land, Coal, Iron & Railway Co., mentioned elsewhere in this issue, includes in its plans the erection of dwellings.

Chester, S. C.—A branch of the Southern Home Building & Loan Association of Atlanta, Ga., has been organized with F. L. Whitlock, president, and C. C. Edwards, secretary.

Chester, Tenn.—S. L. Moore will receive proposals until April 1 for the erection of the Anderson county courthouse, lately reported. Plans can be seen at the office of the architects, Chamberlin & McGeoy, 297 Second street, Memphis.

Conroe, Texas.—Work has been commenced on the courthouse to cost \$20,000 and the jail to cost \$10,000, previously reported.

Cordele, Ga.—Hotel.—It is said that work will commence shortly on the hotel contemplated by the Cordele Hotel Co. S. H. Hawkins, of Americus, can give information.

Covington, Tenn.—A branch of the Interstate Building & Loan Association of Columbus, Ga., has been organized with J. T. Talley, president, and John R. Sloan, secretary.

Dalton, Ga.—E. T. Hardwick will, it is said, erect a residence to cost \$10,000.

Dayton, Tenn.—A branch of the Atlanta Building & Loan Association has been organized with J. R. Crawford, president, and W. F. Jones, secretary.

Denison, Texas.—Enoch Hughes contemplates erecting a residence to cost \$5,000.

Evergreen, Ala.—The Farmers' Alliance intends erecting a warehouse.

Farmville, Va.—The town has accepted the conditioned proposition of the Norfolk & Western Railroad Co. (office, Roanoke) to erect a depot, mentioned last week, to cost \$24,000.

Florence, Ala.—Site has been selected for the city hall. F. L. Rousseau is the architect of the building.

Fort Payne, Ala.—It is reported that the Crystal Lake Land Co. will erect 50 houses.

Fort Worth, Texas.—It is said that the Episcopalians will erect a college.

Fort Worth, Texas.—Thomas D. Ross contemplates the erection of a residence to cost \$10,000.

Fort Worth, Texas.—Mrs. E. A. Hendricks contemplates erecting a \$20,000 residence; W. T. Fakes a \$5,000 residence.

Frankfort, Ky.—The Frankfort Masonic Temple Co. is being organized for the purpose of erecting a Masonic temple. Charter has been applied for.

Gadsden, Ala.—R. B. Kyle will erect a three-story brick business house.

Galveston, Texas.—A branch of the Southern Mutual Building & Loan Association of Atlanta, Ga., has been organized with F. A. Park, president, and J. A. Stubbs, secretary and treasurer.

Galveston, Texas.—Clark & Courts will soon commence the erection of their five-story brick building.

Georgetown, S. C.—F. A. Wilson, of Harrison, Mich., mentioned elsewhere in this issue, contemplates the erection of 50 dwellings.

Grafton, W. Va.—The Grafton Building & Loan Association has been incorporated with a capital stock of \$500,000.

Graham, N. C.—The erection of a fire-proof cotton warehouse is being talked of.

Greenville, Miss.—George Brown, Jacob Alexander and John Cannon will erect a block of brick stores.

Greenville, Miss.—C. M. Johnson, clerk board of supervisors Washington county, will receive proposals until April 7 for plans and specifications for the courthouse previously mentioned; cost, \$65,000; also for a jail with a capacity for 70 inmates.

Harlan, Ky.—Harlan county contemplates issuing bonds to provide for the erection of a jail.

Harper's Ferry, W. Va.—The Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) will, it is stated, erect a depot.

Hayrick, Texas—T. A. Collier, clerk Coke county, Ballinger, Texas, will receive plans, etc., for the erection of a courthouse to cost not over \$10,000.

Hempstead, Texas—The erection of an opera-house is being agitated.

Hillsboro, Texas—Lovell, Miller & Hood, of Childress, have contract for erecting the courthouse previously reported.

Hot Springs, Ark.—An effort is being made to erect a Y. M. C. A. building to cost \$5,000.

Houston, Texas—The Texas Building & Manufacturing Co. has been chartered with a capital stock of \$50,000.

Iron Gate, Va.—The Harrisonburg, Iron Gate & Improvement Co., lately referred to, has purchased 100 lots and is erecting dwellings on them.

Jacksonborough, Texas—The Jack County Fair Association has been chartered by J. N. Rogers, J. R. Wester, George F. Atkinson and others.

Jacksonville, Fla.—The Jacksonville, Tampa & Key West Railway Co. intends commencing the erection of a three-story brick office building within the next 60 days.

Knoxville, Tenn.—Hotel.—Work will soon commence on the hotel recently reported as to be erected by the Knoxville Hotel Co.

Knoxville, Tenn.—The erection of a Y. M. C. A. building for the University of Tennessee is being talked of.

Kosciusko, Miss.—The Baptists contemplate erecting a new church. E. E. Thornton can give information.

La Grange, N. C.—A. C. Davis states that the report referred to last week that he would remove his school to Goldsboro is incorrect. Nothing definite has been done.

Lexington, Ky.—The Lexington Trust Co., lately mentioned, will, it is reported, erect an office building.

Lexington, Va.—The Chesapeake & Ohio Railway Co. (office, Richmond) and the Shenandoah Valley Railroad Co. (office, Roanoke) will erect depots at Glasgow.

Lexington, Va.—Hotel.—The Rockbridge Co. will, it is reported, erect at once at Glasgow a hotel to cost \$53,000.

Liberty, Va.—The Belmont Seminary intends erecting a college building to cost about \$10,000. Rev. E. D. Washburn can be addressed.*

Liberty, Va.—The report that the Presbyterians would build a church, mentioned last week, was incorrect.

Liberty, Va.—Hotel.—Plans for the erection of a hotel to cost not less than \$50,000 by the Bedford City Land & Improvement Co. on its lands near Liberty are under consideration.

Longdale, Va.—The Longdale Iron Co. has commenced erecting a number of dwellings for employees.

Loudon, Ky.—The Masons contemplate erecting a hall. A Baptist church is being erected.

Louisville, Ky.—The First Presbyterian congregation will erect a church to cost \$40,000; J. H. Leathers, a brick dwelling to cost \$24,000; George Gaulbert, a brick and stone dwelling to cost \$20,000; H. V. Newcomb, a warehouse to cost \$20,000; G. A. Robinson, a brick and stone dwelling to cost \$18,000; E. A. Thompson, a brick and stone dwelling to cost \$15,000; J. W. Henning, a brick and iron storehouse to cost \$12,000; J. H. Sillies, a brick and stone dwelling to cost \$11,500.

Louisville, Ky.—Meguiar, Harris & Co. state that they do not expect to erect the warehouse mentioned last week.

Louisville, Ky.—The city intends erecting a central fire station-house to cost \$25,000.

Lowell, N. C.—Hotel.—A company is reported to have been formed for the purpose of erecting a hotel.

Lucas, Ky.—Movements are being made to erect a schoolhouse for the Peters creek and Winn districts.

Lynchburg, Va.—The First Presbyterian congregation will shortly select site for a new church.

Lynchburg, Va.—Hotel.—A movement is on foot to erect a \$200,000 hotel.

Macon, Ga.—The plan for the erection of a union depot to cost \$1,000,000 by the Central Railroad & Banking Co. of Georgia (office, Savannah) is being revived.

Macon, Ga.—Hotel.—M. Nussbaum and associates, who have purchased the Brown House, contemplate remodeling it.

Macon, Miss.—Hotel, etc.—A company is reported to have been organized with a capital of \$125,000 for the purpose of building a hotel, opera-house, cotton factory and oil mill.

Madisonville, Texas—W. A. Price will erect a store-house.

Mansfield, Texas—A building and loan association has been organized with A. B. Pyles, president, and I. H. Harrison, secretary.

Mansfield, Texas—Efforts are being made to erect a brick block and a \$6,000 college building.

Marble Falls, Texas—J. T. Woodard, of Burnet, and Theo. Losey, of Marble Falls, have contract for erecting the college building lately reported.

Martinsburg, W. Va.—A building and loan association with a capital stock of \$50,000 is being organized.

Martinsburg, W. Va.—The Improvement, Loan & Building Association has been chartered with a capital stock of \$90,000.

Middleborough, Ky.—W. H. Willet, architect, has plans for the erection of a house for the Oconita Club. The building will be 100x40 feet in size, three stories high and cost \$20,000.

Middleborough, Ky.—W. H. Willet, architect, has plans for the erection of a five-story office and flat building 75x125 feet to cost \$50,000. Elevators, steam heating apparatus, etc., will be used.

Middleborough, Ky.—Plans have been prepared for the residence to be erected by O. W. Davis.

Milton, N. C.—The Methodists contemplate erecting a church.

Mt. Sterling, Ky.—Hotel.—The Mt. Sterling Improvement Co. will, it is reported, erect a hotel.

Mt. Sterling, Ky.—J. H. Walker, of New Decatur, Ala., is reported to have secured the contract for erecting the courthouse lately mentioned.

Nashville, Tenn.—Work has been commenced on the church to be erected by the Tulip Street Methodist congregation at a cost of \$30,000.

New Bern, N. C.—A branch of the North Carolina Building & Loan Association has been organized with F. Ulrich, president, and E. M. Green, secretary.

New Decatur, Ala.—C. E. Hoy contemplates erecting a two-story brick house 55x100 feet. L. B. Wyatt and J. T. Crass also intend erecting like buildings.

New Decatur, Ala.—Architect Laine has prepared plans for the Exchange Bank building to be erected.

New Orleans, La.—The erection of a Y. M. C. A. building is being talked of. The secretary of the association can give information.

New Orleans, La.—John J. Harrington, mentioned last week as the lowest bidder, has secured the contract for roofing the custom-house with copper at \$38,000.

New Orleans, La.—Architect Henry is said to have secured contract for the erection of the riding school building lately mentioned. The building is to be 122x72 feet.

Oglethorpe, Ga.—Hotel.—It is stated that the Oglethorpe Improvement Co. will erect a hotel.

Onancock, Va.—The enlarging of the Accomac county jail is contemplated.

Orange, Texas—B. F. & A. D. Henson will, it is reported, shortly erect a brick building.

Owenton, Ky.—Hotel.—A \$15,000 hotel is to be erected this spring.

Paris, Ky.—Site has been selected for the opera-house lately reported as to be erected by the Paris Opera-House Co.

Portsmouth, Va.—The Norfolk & Carolina Railroad Co. (office, Norfolk) contemplates erecting a freight depot.

Pulaski City, Va.—J. D. Whitman & Co. and T. L. Lyons contemplate erecting a block of three-story brick buildings to be used for store and hall purposes.

Quannah, Texas—Hotel.—Another hotel will probably be erected.

Richlands, Va.—Hotel.—The Clinch Valley Coal & Iron Co. (office, 134 South Fourth street, Philadelphia, Pa.) has plans in preparation for the erection of a \$40,000 hotel, reported last week.

Richmond, Ky.—The Richmond Opera-House Co., lately mentioned, will erect an opera-house. Stockton & Brooks can give information.

Richmond, Va.—The Richmond College will erect 2 dwellings to cost \$11,000—plans by M. J. Dimmock; also a dwelling to cost \$10,000—plans by B. J. Black.

Richmond, Va.—The Clay Street Methodist congregation contemplates enlarging its church.

Richmond, Va.—A bill has been introduced into the legislature to incorporate the Virginia Sporting & Athletic Club, with John M. Bailey, George H. Blood and others as incorporators.

Richmond, Va.—Albert L. West has prepared plans for a frame tabernacle 60x150 feet, to be erected by the Grace Street Baptist congregation. T. H. Ellet can give information. The congregation is also preparing to erect a new church on the site of the old one. The new building will cost about \$40,000. A. L. West is the architect, W. E. Hatcher, D. D., can give information.

Roanoke, Va.—The Roanoke Building, Loan & Land Co. has been organized with John H. Davis, president, and Hugh T. Day, secretary.

Rock Hill, S. C.—A. D. Holler has contract for erecting the Second Presbyterian Church.

Rockwood, Tenn.—Hotel.—The Roane Iron Co. will, it is stated, erect at once the hotel lately reported; cost, \$50,000.

Rome, Ga.—Hotel.—Efforts are being made to organize a company for the purpose of erecting a hotel at West Rome. Frank C. Brown can give information.

Salisbury, N. C.—It is said that the Richmond & Danville Railroad Co. (office, Richmond, Va.) contemplates erecting a depot.

San Antonio, Texas—The city council has recommended the appropriation of \$50,000 for the erection of school buildings.

San Antonio, Texas—Herman Kampman has commenced the erection of his five-story business block.

San Antonio, Texas—Site has been purchased for the building to be erected by the Turners' Association.

San Antonio, Texas—It is reported that a syndicate will erect a business block to cost \$100,000.

Sanford, Fla.—William T. Cotter is preparing plans for a three-story office building.*

Savannah, Ga.—Herman Myers contemplates erecting a residence to cost about \$12,000; P. W. Meldrum, 16 tenement houses, to cost about \$6,000 each; A. P. Solomon, 8 two-story houses, to cost

\$12,000; Henry Solomon, a residence at Tybee; J. S. Wood, a residence.

Savannah, Ga.—Lewis F. Goodrich, of Augusta, is, it is reported, preparing plans for 3 five-story stores to be erected by the estate of J. Waldburg.

Sheffield, Ala.—It is said that the Sheffield Coal, Iron & Land Co. has closed a contract for the sale of \$50,000 of lots, on which the purchasers will erect \$50,000 of houses.

Shenandoah Junction, W. Va.—Hotel—There is said to be no prospect for the erection of the hotel mentioned last week.

Shenandoah Junction, W. Va.—A building and loan association has been organized.

Shreveport, La.—J. M. Foster, president police jury, invites proposals until March 31 for the erection of a brick and stone courthouse according to the plans prepared by L. M. Weathers, of Anniston, Ala. Plans can be seen at the office of Weathers & Weathers, Shreveport.

Silver Run, Md.—Contract will shortly be let for the erection of the St. Mary's Reformed Church, previously reported Absalom Koonts can give information.

Smithville, Ga.—Hotel.—The Central Railroad & Banking Co. of Georgia (office, Savannah) will erect the hotel mentioned last week.

St. Augustine, Fla.—Mr. Gilson, of Saratoga Springs, N. Y., has purchased the property of M. P. Usina, of Savannah, Ga., and is, it is reported, endeavoring to organize a company for the purpose of erecting villas on it.

Sylacauga, Ala.—Hotel.—It is stated that a hotel is to be erected.

Tallahassee, Fla.—The Masons and Odd Fellows have organized a stock company and contemplate erecting a \$15,000 opera-house.

Tarboro, N. C.—The Baptists intend erecting a \$10,000 church.

Tazewell, Tenn.—The erection of a new jail for Claiborne county is being talked of.

Tyler, Texas—Moore & DeShong have contract for erecting the Methodist church lately mentioned.

Union, S. C.—A branch of the Southern Building & Loan Association, of Huntsville, Ala., has been organized with T. C. Duncan, president, and Frank L. Townsend, secretary.

Vicksburg, Miss.—Adolph Rose will, it is said, erect a 5-story stone front business block.

Vicksburg, Miss.—L. L. Leach, of Chicago, Ill., is the lowest bidder for the erection of the public building recently mentioned, his bid being \$77,569; work to be finished in 12 months.

Victoria, Texas.—The erection of a courthouse by Victoria county is being talked of.

Waco, Texas.—The Waco Fair & Driving Park Association has been chartered with a capital stock of \$10,000, by Eugene Williams, W. R. Clifton and W. C. Watson.

Waco, Texas.—Louis Newberry and George Levy contemplate erecting a theatre for summer use.

Waco, Texas.—J. H. McNeil has secured the contract for erecting the building recently reported as to be built by the Provident Life Insurance Co., of New York city.

Waycross, Ga.—L. A. & W. M. Wilson will erect a 4-story brick building, 103x73 feet, to be used for store and hall purposes.

Waynesboro, Va.—Hotel.—The Waynesboro Co. desires plans for its hotel reported last week to be erected; cost to be \$15,000 or \$20,000.

Wheeling, W. Va.—It is reported that Simon Baer's Sons will erect a seven-story wholesale grocery building on the Hubbard saw mill property, mentioned last week.

Wheeling, W. Va.—F. H. Lange contemplates erecting a large residence.

Wheeling, W. Va.—Site has been purchased for the Ohio county jail recently mentioned.

Willcockson, Ark.—Hotel.—It is said that the Panther Creek Mining Co. intends erecting a hotel near its mines.

Winchester, Ky.—Hotel.—Samuel Ewalt contemplates enlarging his hotel.

Activity at Bedford City (formerly Liberty).

BEDFORD CITY, VA., March 11, 1890.
Editor Manufacturers' Record:

The First National Bank of Bedford City will open its doors to depositors and the public on Monday, March 17. Bids for the new Bedford City reservoir will be opened Tuesday, March 11. The Bedford City Land & Improvement Co. and the Longwood Park Land & Improvement Co. have completed their organizations, and will proceed at once to put their valuable stocks, for which there is already a hardly suppressed demand, on the market. Plans for the building of a beautiful and artistic hotel on the grounds of the Bedford City Co. are now under discussion, and the hotel will be built at once at a cost of not less than \$50,000. A broom factory will be established in Bedford City as a new enterprise at once.

Virginia's Latest Success.

And now we have the coming city of Glasgow exemplifying the enterprise, courage and convictions of the people of Virginia, with General and ex-Gov. Fitzhugh Lee at the head of it. In a few years we shall see the prosperous, healthy, heavy-preserved city of Glasgow proving the faith now being manifested in Virginia's magnificent resources.

The town stands on the broad tongue of land lying between the James river and the North river, the former flowing from west to east, the latter from north to south. These two swift-flowing streams come together at the only opening for hundreds of miles in the iron-laden Blue Ridge mountain, through which these confluent rivers, after centuries of endeavor, finally succeeded in cutting a great natural canal.

When I was a boy one of the most pleasant pictures that I loved to contemplate was a wood-cut made from a sketch by "Porte Crayon," a correspondent of Harper's Magazine, who, being deeply imbued with admiration of Virginia scenes, essayed a series of illustrated articles on the region hereabout. The particular picture that I have in mind was one representing the passage of the silvery James through the mighty mountain.

As I stood a few days ago on the heights back of Glasgow I realized more fully than ever before the fidelity to nature of the great portrayer of Virginia's picturesqueness. For, from these Glasgow villa sites the original of the wood-cut in Harper's was vividly in view. The day was clear and crisp. I had come up from Lynchburg—an hour's ride early in the morning. The opening of the town—the first sale of lots had taken place the day before. Balcony Falls is the station where passengers from the James River division of the Chesapeake & Ohio Railroad disembark for Glasgow. To reach the center of the coming city necessitates a walk of half a mile. The hour was so early and the air so bracing that I could not resist the temptation to walk half a mile beyond the hotel in order to get a good view of the scene which I had lovingly admired in boyhood in the old number of Harper's Magazine above referred to.

I shall not now attempt to describe the entrancing beauty of what I saw. It is my intention to devote a special article to the view from Glasgow. Right here, however, for the benefit of our readers, I will state that all passengers on the trains of the Shenandoah Valley Railroad can *en passant* enjoy this same superb view from the left-hand windows going south and the right-hand windows going north. The city of Glasgow is located a few miles north of the Natural Bridge station.

There are many points of interest connected with this place that a casual reader would peruse with interest, but I am not undertaking to describe the place in this brief notice. Glasgow will soon assume a prominence that will command the attention of more graphic pens than mine.

I intend in my next to say a word to business men about the advantages of the location and the resources that are relied upon to convert it into an industrial city, but I can now only briefly refer to matters which later on will be more fully elaborated.

On March 5th and 6th the new city was opened to the public. It was not a "touch and go" scheme. It was not speculative. For months General Fitzhugh Lee, Virginia's last governor, Mr. W. A. Anderson and Mr. Miles M. Martin and their associates have been at work preparing a solid foundation for what I have just designated in the head-line of this article, "Virginia's Latest Success."

A strong company had been organized, backed by millions of dollars. It was a success from the start. Not only was a model city site purchased, but thousands of acres of valuable mineral land. And so when the first sale of lots occurred there were present buyers from all over the United States. The prices set by the company were very low. Many lots were sold at an advance an hour after they were bid off, because only a few lots were offered.

In all my experience I do not recall a case where there were so many original buyers who the next day added to their holdings at prices so much larger than they could have bought for at the outset. Confidence grew as the facts were found out.

Next week I shall try to write a more detailed account of what I saw at Glasgow, which is going to be a city.

THOMAS P. GRASTY,
WASHINGTON, D. C., March 10, 1890.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Boiler.—The Athens Furniture Co., Athens, Ga., wants prices on a 35 horse-power portable boiler for a saw mill.

Boiler.—Blount & Bell, East Point, Ga., wants a 60 horse-power steel boiler.

Boiler and Engine.—J. A. & W. H. Port, 119 and 121 Freeman street, Brooklyn, E. D., N. Y., want a steam boiler, horizontal, with 4-inch tubes; also engine of 100 to 125 horse-power. They expect to use shavings as fuel.

Boiler and Engine.—W. W. Wainright, Palestine, Texas, wants an 8 horse-power boiler and engine.

Boiler and Engine.—H. Wade & Co., Wakulla, N. C., want a boiler and engine.

Boilers and Engine.—P. C. Clegg, Americus, Ga., wants boilers and engine.

Boilers and Engine.—The Lick Branch Coal & Coke Co., Maybeury, W. Va., will want boilers and engine.

Boiler, Pump, etc.—The Vernon Electric Light & Power Co., Tallapoosa, Ga., may want a boiler, pump, tank, etc.

Bolting Machinery.—Kirby & Burckett, 24 Liberty street, New York, N. Y., want 4 or 5 good second-hand bolting reels.

Brick Works.—P. C. Clegg, Americus, Ga., wants machinery for brick works.

Builders' Supply Factory.—Sitterding & Drever, Buena Vista, Va., expect to purchase some additional machinery for their builders' supply factory.

Canning Factory.—A. J. Parszyk, Knoxville, Tenn., will probably want some machinery for a canning factory.

Cement.—J. C. Mallory, Baltimore, Md., will receive bids until March 22 for furnishing and delivering 300 barrels of Portland cement.

Chilson & Burnham, Henrietta, Texas, want prices on an electric-light plant.

Concentrating Plant, etc.—Walter Graham, manager Graham Furnace Co., Graham, Va., wants prices on washing and jiggling machinery for concentrating iron ore, also pumps.

Concrete Works.—The St. Augustine Improvement Co., St. Augustine, Fla., may want boilers, mixers, rolls, etc., for concrete works.

Cotton Ginnery.—Chilson & Burnham, Henrietta, Texas, want prices on machinery for a cotton ginnery.

Corn Cutter.—The Black Walnut Canning Co., Black Walnut, Va., wants a corn cutter.

Electric-light Plant.—The Pittsburgh Development Co., Big Spring Depot, Va., will purchase an electric-light plant.

Electric-light Plant.—The Pine Bluff Manufacturing Co., Pine Bluff, N. C., wants a small electric-light plant.

Elevating Machinery.—The Lick Branch Coal & Coke Co., Maybeury, W. Va., wants elevating machinery.

Elevator.—Penn & Rison, Danville, Va., will purchase a steam elevator.

Electrical Street Railway.—The Port Aransas Co., Corpus Christi, Texas, want to purchase an electrical street railway outfit, etc.

Engine.—Armstrong & Co., Weimar, Texas, want a stationary engine.

Flour Mill.—C. H. Oliver, Oliver, Va., will want machinery for a 25-barrel flour mill to be operated by water-power.

Flour Mill.—C. P. Robertson, Box 46, Chattanooga, Tenn., wants complete outfit for a modern flour mill.

Flour Mill.—J. M. Hunter, Carter's Creek, Tenn., will want a complete outfit for improved roller flour mill.

Heating Apparatus.—J. E. Welch, High Point, N. C., wants heating apparatus.

Ice Factory.—The West Point Artesian Ice Co., West Point, Va., wants machinery for ice factory.

Hollow Brick Partitions.—Wm. T. Cotter, Sanford, Fla., desires prices and information concerning hollow brick partitions for a three-story office building.

Ice Machine.—G. M. Tidler, New Market, Va., wants prices on small ice machine of about 1,000 pounds daily capacity.

Iron Furnace.—The Queen City Iron Mining & Smelting Co., Queen City, Texas, wants all machinery necessary to erect and operate a 10-ton iron furnace.

Iron Pipe, etc.—Proposals will be received at the City Water Works Office, Fort Worth, Texas, until March 31 for furnishing 5½ miles of water mains, including lead, valves, etc.

Iron Roofing.—F. Beallie, Alexandria, Va., will want iron roofing.

Iron and Woodworking Machinery.—Armstrong & Co., Weimar, Texas, want improved woodworking machinery, also drill, punch, shears, etc.

Iron Lathe and Planer.—B. A. Smith, Rutherford, Tenn., will want an iron lathe and a heavy planer.

Kettles.—The Acme Vinegar & Pickle Works, Galveston, Texas, wants several enameled steam jacket kettles of 50 to 60 gallons capacity.

Laundry.—H. W. Green, Lock Box 29, Wytheville, Va., wants prices on machinery for a steam laundry.

Malleable Iron Fittings.—The Camden Iron Works, Salem, Va., wants the address of manufacturers of malleable iron fittings for wrought iron fences, etc.

Mining Machinery.—The Douglassville Mineral Land & Improvement Co., Douglassville, Ga., will want machinery if it decides to develop its property.

Mining Machinery.—The Laney-Jackson Lumber & Railroad Co., Laney, Ala., will probably want iron mining machinery.

Paint Mills.—Armstrong & Co., Weimar, Texas, will want paint mill, also mill to grind slate to a flour.

Picker.—The Henderson Knitting Mills, Troy, Ala., will put in a rag and a burr picker.

Planer.—T. J. Dudley & Sons, Columbus, Ga., want a 42-inch diagonal finishing planer and one or two smaller machines.

Planer.—W. W. Wainright, Palestine, Texas, wants a pony planer.

Planers, etc.—The Portsmouth Basket Works, Portsmouth, Va., want double surface planer and resaw, also an iron planer and milling machine.

Pump and Stand-pipe.—The Water Committee of Savannah, Ga., is securing estimates until March 19 on a pump with capacity of 10,000,000 gallons daily and a stand-pipe of at least 40 pounds pressure.

Pump.—The Lick Branch Coal & Coke Co., Maybeury, W. Va., will want a pump.

Rails.—The Port Aransas Co., Corpus Christi, Texas, want to buy at once 160 tons of 25-pound steel rails for a street railway.

Railroad Supplies.—The Laney-Jackson Lumber & Railroad Co., Laney, Ala., expects to purchase railroad supplies for an extension of its road.

Resaw.—The Black Walnut Canning Co., Black Walnut, Va., wants a resaw.

Roofing and Siding.—B. A. Smith, Rutherford, Tenn., will want iron roofing and siding.

Saw Mill.—Terry & Slagle, Cookeville, Tenn., want a saw mill to be operated by turbine water wheel.

Saw Mill.—John Madden, Cookeville, Tenn., wants a saw mill.

Sewer Pipe and Brick Works.—The Meridian Pottery & Manufacturing Co., Meridian, Miss., wants machinery for the manufacture of sewer pipe, drain tile, etc., also fire and pressed brick.

Shoe Factory.—The Asheville Shoe Co., Asheville, N. C., will want some machinery for its factory.

Soap Factory.—H. W. Green, Lock Box 29, Wytheville, Va., wants prices on machinery for soap factory.

Spoke Lathes and Belting.—S. Perry, High Point, N. C., will probably purchase spoke lathes and 16-inch belting.

Steam Hammer.—Blount & Bell, East Point, Ga., want a skein setter and fitter and a Bradley cushion hammer.

Steam Heating Apparatus.—Steam heating apparatus, including boiler, will be wanted for the Belmont Seminary building at Liberty, Va. Address E. D. Washburn, Liberty, Va.

Steam Heating Apparatus.—Joseph Cohn, Lynchburg, Va., wants prices on steam heating apparatus.

Steam-heating Apparatus.—Wm. T. Cotter, Sanford, Fla., wants prices and information on steam-heating apparatus for a three-story office building.

Water Works.—Greenville, S. C., will want bids for the construction of a system of water works. E. F. S. Rowley, mayor, can be addressed.

Water Works.—T. J. Hoppel, Trenton, Tenn., will receive proposals for constructing water works to cost not more than \$20,000.

Water Wheel Buckets, etc.—J. W. Bonner, Warm Springs, Va., wants buckets for a 10-inch turbine water wheel, also cotton or gum belting.

Wire Rope, etc.—Walter Graham, manager Graham Furnace Co., Graham, Va., wants prices on wire rope haulage of iron ore, also cost of plain wire rope.

Woodworking Machinery.—The Pine Bluff Manufacturing Co., Pine Bluff, N. C., wants second-hand small size planer, matcher and molding blades, band, jig, shingle and lath saws, also boring and mortising machinery.

Woodworking Machinery.—Lambert Bros. Waynesboro, Va., will want planer raiser, blind slot tenoning machine, planer and a 24-inch smoother.

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WANTS.

BASIC STEEL.—A man of experience in the production of Basic Steel desires a position as Superintendent or Assistant to General Manager. Address "BASSCHE," care Manufacturers' Record, Baltimore, Md.

A Gentleman Desires to Invest about \$10,000 in and engage actively in the construction or reorganization of a water company or street railway. Address A. B. L., Manufacturers' Record office.

FURNACE SUPERINTENDENT WANTED who has had considerable experience with coal plant, and can give satisfactory reference. Prefer party who can invest ten to twenty thousand dollars in company. Highest grade brown ores; fine location. Address "FURNACE," drawer 375, Birmingham, Ala.

WANTED Two First-Class Traveling Machinery Salesmen to sell Engines, Rollers, Grist Mills, Cotton Gins and Cotton Presses. None need apply without first-class recommendations and who understand the operating of above machinery. Must be under thirty-five years of age. Apply to MILBURN GIN & MACHINE CO., Memphis, Tenn.

NOTICE TO COTTON MILL OVERSEERS— SUPERINTENDENT WANTED.—Energetic young man thoroughly acquainted with manufacturing Brown Sheetings, Shirtings and Drilling. Must be sober, industrious and quick at figures. Young man, 25 to 35 years of age, desiring to be taken on trial in position where advancement will depend on his thrift and ability, will correspond with EXPOSITION COTTON MILLS, Atlanta, Ga.

PROPOSALS.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 12 o'clock P. M., on the 10th day of April, 1890, for a clock in the tower of the U. S. Courthouse, Postoffice, and other buildings at Carson City, Nevada, in accordance with the drawing and specification copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRIM, Supervising Architect. March 8th, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 12 o'clock P. M., on the 26th day of March, 1890, for all the labor and materials required to build complete the new Stone Porch at Church Street Entrance to the United States Courthouse, Postoffice, &c., building at Rochester, N. Y., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRIM, Supervising Architect. March 7th, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 12 o'clock P. M., on the 24th day of March, 1890, for all the labor and materials required to construct complete, the iron ceiling, framing and the iron partitions in fifth story of the U. S. Court House and Postoffice building at Pittsburgh, Pa., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRIM, Supervising Architect. March 2d, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 12 o'clock P. M., on the 21st day of March, 1890, for all the labor and materials required in the erection and completion of the extension of the U. S. Postoffice, Court House, &c., building at Detroit, Michigan, in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRIM, Supervising Architect. February 26th, 1890.

PERSONS WISHING TO INVEST

Southern Timber Lands

Will do well to correspond with
I. L. WITHERS, Columbia, S. C.

FOR SALE.

The Manchester Cotton Mill,

Located at Manchester, N. C., on the Cape Fear & Yadkin Valley R. R., 11 miles from Fayetteville, N. C.

The mill is fully equipped for making Plaids, Checks and other colored goods. Is in running order, and could be started up at any time. Has both water and steam power. Building as follows: Dye House, Store, Machine Shop, with lathe and full set of tools, Gin and Gin House, 7 Tenement Houses, and 33 acres Land. Has Gas Machine and Piping for lighting every part of the mill. Capacity 1,750 Spindles and 33 Looms. For further particulars, address

THOS. P. BALDWIN, Prest.
5 & 7 German Street, Baltimore, Md.

We Wish to Sell Our

Woolen Mill,

75 feet long, 40 wide; 3½ stories, besides a dye-house adjoining on a large lot, with a good water supply; runs by steam. Good engine and boiler. Building frame, in good repair, painted, with metal roof, about three minutes' walk to court house. A two-story mill with looms, one broad and three narrow; three twisters, one a ring twister, and a new gig for napping blankets and flannels, and everything complete for making yarn, blankets, skirts, flannel, jeans, etc., etc. We have built up a trade in stocking yarn, blankets, skirts, flannel and jeans. We are now running, but we wish to sell, as we are getting too old to continue. Our town has about 3,000 inhabitants. The county seat of Brown county, on the Cincinnati, Georgetown & Portsmouth R. R., 5 miles from the Ohio River & C. & O. R. R., 12 miles from the Ohio & Northwestern R. R., a railroad partly completed from here to the last named railroad. We are 40 miles from Cincinnati, 19 from Mayfield, Ky. There is wool enough raised in this county to supply two such mills. Wood \$1.50 per cord; coal from the river cheap. No other mill in the town or county. Will give a bargain to parties wishing to buy. This is the time to purchase, and start in next spring and manufacture for old customers, or on a line of goods such as may suit the views of the buyer. Address

R. YOUNG & CO.
Box 128, Brown Co., Georgetown, O.

NOTICE OF SALE.

The machinery, stock on hand and building owned by the

Birm'gham Bridge and Bolt Works

will be sold at public auction to the highest bidder on Saturday, March 15th, 1890, at 12 o'clock M., on the southeast corner of 1st avenue and 20th street, Birmingham, Ala. Terms, one-third cash, balance in three notes at 6, 12 and 18 months respectively, with interest at 8 per cent. For further information address

J. D. MOORE, Prest.,

Birmingham, Ala.

THE BAY LINE

For Old Point Comfort, Norfolk and the South.

Steamers leave daily (except Sunday) Union Dock 6.30 P. M., Canton Wharf 7 P. M.; arrives Old Point Comfort 7 A. M., at Norfolk at 8 A. M., Portsmouth 8, 15 A. M. At OLD POINT COMFORT connect with CHESAPEAKE & OHIO RAILROAD for Richmond, Charlottesville, Greenbrier, White Sulphur Springs, Louisville, Cincinnati and all points West. At NORFOLK with NORFOLK & WESTERN RAILROAD for Petersburg, Richmond, Lynchburg, Roanoke, Bristol, Knoxville, Chattanooga, Memphis and the Southwest; also with the NORFOLK SOUTHERN RAILROAD for Elizabeth City, Edenton and Eastern North Carolina. At PORTSMOUTH, VA., with SEABOARD & ROANOKE RAILROAD for Weldon, Raleigh, Southern Pines, Charlotte, Fayetteville, New Bern, Wilmington, Charleston, Columbia, Augusta, Savannah, Jacksonville and all PRINCIPAL SOUTHERN CITIES.

Palace Steamers, Unsurpassed Cuisine, Undisturbed Night's Rest. Sure Connection. For Tickets and information apply at Company's Office, 129 E. Baltimore St. or on board steamers.

E. BROWN, G. T. A. KENNON JONES Agent

POPULAR AND DIRECT ROUTE.

THE BAY LINE

For Old Point Comfort, Norfolk and the South.

WRITE FOR PRICES TO

THE SOUTHERN EQUIPMENT CO.

Representing reliable manufacturers of Railway, Mining and Mill Supplies.

ORDERS FILLED PROMPTLY.

Chattanooga, Tenn.

FOR SALE.
Wood-Burning Locomotives.
Standard Gauge—15 Engines, 25 to 30 tons; one 10-ton Baldwin-Forney. 3-ft. Gauge—10 Shay patent, 8 to 10 tons; two Porter 10 and 13 tons. Other Engines, cars and rails.
A. S. MALES & CO.,
15, 16 and 17 Astor Building, Cincinnati, O.

STEEL RAILS AND EQUIPMENT.
Light Sections, 8 to 45 lb. New and Standard Sections, 50 lb. and up. Second-hand. Locomotives, Passenger and Freight Cars, all descriptions, for sale.
O. W. CHILD & CO.
145 BROADWAY, NEW YORK.

Steam Fire Engines
FOR SALE.

One Hunneman and one Button in first-class condition. Also all kinds of second-hand Engines and Boilers for sale cheap. For terms, prices, &c., address

Lowell Steam Boiler Works,
LOWELL, MASS.

Estimates given on New Work of every description.

FOR SALE!

10 Hoisting Engines, with and without boilers. 2 Ingersoll Compressors, straight line. 2 Rand Compressors, duplex. 2 Root Rotary Blowers. 1 Souther Steam Shovel. 12 Tubular Boilers, 6 to 90 horse-power. 1 Contractors' Locomotive. 30 Contractors' Dump Cars, 38-in. gauge. 1 Hayward Bucket.

For particulars apply to

J. C. SAXTON,
52 BROADWAY, NEW YORK

For Sale.
BOILERS.
41 Second-Hand and 23 New Boilers,
13 Second-Hand and 19 New
ENGINES.
At buyers' prices. Address
CASEY BOILER MFG CO Chattanooga, Tenn.

Cotton and Woolen
MACHINERY.

280 Cards, 36 inch, top flat, self-stripping; 57 Cards, 36 inch, Foss & Pevey, and all other Machinery for Cotton Mills to match.

My Store Houses here have over 2 ACRES of floorage, which is covered with good machinery, including nearly full systems for Cotton and Woolen Mills.

JEREMIAH CLARK,

Lowell, Mass. Office, 63 Dutton St.

FOR SALE.
Five Single Surfacing. Three Double Surfacing. Three eight-inch Matchers (four-sided). Two fourteen-inch Matchers (four-sided). Two twenty-four-inch Matchers (three-sided). ALL SECOND-HAND. Send for full list to

The PREBLE MACHINE WORKS CO.

36 & 40 W. MONROE ST., CHICAGO, ILL.

SECOND-HAND MACHINERY.

1 Iron Planer, planes to feet long, \$248. 1 " " " 5 feet " 2524 in.

and other sizes also.

1 Engine Lathe, 15 feet bed, 35 in. swing.

" 13 " " 31 " "

" 12 " " 20 " "

" 11 " " 19 " "

" 8 " " 15 " "

" 8 ft. bed, 20 in. swing, N.Y.S.E.

Co. make, and various other sizes.

10 inch Plain Drilling Machine.

1 Betts No. 1 Horizontal Boring Mill.

2 in. Crank Shaping Machines, A1 order.

1/2 in. Slotted, automatic feed.

1 Pratt & Whitney Lincoln Millers.

1 Pond Index Miller.

1 No. 5 Stiles & Parker Press, A1.

Send for list Second-hand tools.

NEW YORK MACHINERY DEPOT,

Brooklyn Bridge Store, 16, New York.

BARGAINS.

Second-Hand Machinery. Good Condition.

L. F. SEYFERT,

Nos. 437, 439, 441 N. 3d St., PHILADELPHIA, PA.

1 25 H. P. Lidgerwood Hoist Eng., cyl. 10x12 in.

6, 8, 10, 15 and 20 H. P. Portable Hoisting Engines, single & double cyl. & drum. Comb'd & single.

1 15 H. P. Agricultural Eng. & Boiler on wheels.

1 6 H. P. Frick Combined Engine and Boiler.

15, 20, 30 & 30 H. P. Southwark Aut. H. S. Eng's.

1 90 H. P. Hor. Eng., cyl. 16x36 in. Hoff & Fontaine

1 100 H. P. Hor. Engine, cyl. 18x24 in. R. & C.

2 80 H. P. R. T. Boilers, 60¹/₂x15¹/₂(52)¹/₂ in. tubes.

1 35 H. P. Locomotive Boiler, (50) 3 in. tubes.

2 25 H. P. R. T. Boilers, 42¹/₂x10¹/₂(28) 3 in. tubes.

1 18 H. P. R. T. Boiler, 36¹/₂x10¹/₂(26) 3 in. tubes.

50 Upright Tub. St'l Boils'. New. 4-40 H.P. Cheap

Farris & Miles Steam Hammer.

2 Light Trip Hammers.

1 New Haven Planer, 20¹/₂x20¹/₂x5¹.

1 H. B. Smith 4-sided 4 in. Horizontal Moulders.

1 26 in. Double Surfer, double belted. G. & W.

PLEASE WRITE FOR PRICES.

Bargains in Machine Tools.

We have the following Machine Tools, taken mainly in exchange for those of our own manufacture. We will sell them low.

LATHES.

9-in. x 2-ft. P. & W. Bench Hand Lathes. G. Order.

12-in. x 2-ft. P. & W. Bench Hand Lathes. "

12-in. x 2-ft. in. P. & W. Bench Turret Lathes. "

12x2 Star Hand La. New.

12x2 Flat Engine Lathes. Good as new.

12x6 Lathe. Fair Order.

12x7 Lathe. Fair Order.

12x8 Star Tool Co. Lathes. Good Order.

12x9 D. W. Pond Lathes. A No. 1 Order.

12x10 Conway Lathes. Good Order.

12x10 Niles Lathes. Good Order.

12x12 L. W. Pond Lathes. Good Order.

12x12 Ames La. Good Order.

12x12 Engine Lathes. Good Order.

12x12 Gray Lathes. Good Order.

12x12 Wolford La. he. Fair Order.

12x12 Lathe. Good Order.

12x12 Niles La. he. Good Order.

PLANERS.

12-in. W. & L. Shaper Travelling Head. Good Order.

12-in. in. Hendry Shaper. Good Order.

12x12 Planer 24x24". Good Order.

12x12 Planer 36x36". Stevens. Good Order.

MISCELLANEOUS.

1 Hendy 3 Spindly Drill Press. Good Order.

1 25-in. Snyder B. G. P. F. Drill Press. Good as new.

30-in. Bar Radial Drill. Good Order.

34-in. Drill. Good Order.

1 P. & W. No. 4 Milling Machines. Good as new.

1 P. & W. No. 5 Hand Miller. Good as new.

1 No. 4 Garvin Miller. plain. Nearly New.

1 No. 4 Garvin Miller. plain. New.

1 Profiler. G. Order. 1 Davis Key Seater. G. Order.

1 Standish Foot-Power Hammer. New.

1 Blundell & Co. Screw Press. Good Order.

1 12-in. Bement Slotter. Good Order.

1 12-in. Slotter. Good Order.

1 Emery Grinder and Stand. Good Order.

1 Brass Melting Furnace. Good Order.

Write for Prices.

New additions constantly made to this list.

Complete estimates made on outfitts.

THE LODGE & DAVIS MACHINE TOOL CO.

Cincinnati, Ohio.

Manufacturers of Engine Lathes, Shapers, Upright Drills, etc. Dealers in Iron and Brass Working Machinery.

Western Store 68 & 70 S. Canal St., Chicago.

FOR SALE.

—BY—

JAMES MURRAY & SON.

One 40 H. P. Horizontal Steam Engine, (second-hand). One 60 H. P. Horizontal Tubular Boiler, (second-hand). New Engines and Boilers on hand and built to order. One S. H. Steam Pump, one S. H. Steam Hammer.

PULLEYS, HANGERS & SHAFTING.

102 to 108 E. York St., Baltimore.

Second-Hand Machinery Cheap.

1 96 in. x 20 ft. Engine Lathe.

1 96 in. x 20 ft. Engine Lathe with end face-plate.

1 60 in. Pulley-turning and Boring Lathe.

15 in. x 10 ft. Engine Lathe.

72 in. Universal Radial Drill.

12 in. Vertical Slotted, Bement.

12 in. x 36 in. Geo. H. Corliss Engine.

37 in. Turret Head Chucking Machine. New.

No. 3 Brainard Universal Milling Machine.

Lincoln Pattern Milling Machine.

Heavy Universal Milling Machine.

2-Spindle Gang Drill.

2-Spindle Horizontal Nut-Tapping Machine.

Write us for what you want and send description of Machinery that you have to trade or sell.

THE J. A. MACKINNON MACHINERY CO.

22 Warren Street, New York.

Second-hand Machinery in Good Order

FOR SALE CHEAP.

Engine Lathes—36 in. x 20 ft.; 60 in. x 27 ft.; 42 in.

x 18 in.; 31 in. x 18 ft.; 59 in. x 25 ft.; 24 in. x 18 ft.

x 10 in. and 12 ft.; 20 in. x 8 ft. and 14 ft.; 35 in. x 6 and 8 ft.; 1 each 24 in. x 10 in. and 24 ft.; 24 in. x 12 ft.

x 15 in. x 10 ft. Engine Lathe.

12 in. Universal Radial Drill.

12 in. x 36 in. Geo. H. Corliss Engine.

37 in. Turret Head Chucking Machine. New.

No. 3 Brainard Universal Milling Machine.

Lincoln Pattern Milling Machine.

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22 Warren Street, New York.

Second-hand Machinery in Good Order

FOR SALE CHEAP.

Engine Lathes—36 in. x 20 ft.; 60 in. x 27 ft.; 42 in.

x 18 in.; 31 in. x 18 ft.; 59

TRADE NOTES.

THE latest idea in preparing cotton for the market is to separate the lint from the seed, and then work the seed for oil, short lint, meal and hulls, sell the marketable products, and utilize the remainder to make a fertilizer to go back into the soil. The planter sells the marketable products and restores the plant food back to the soil. Smith, Vaile & Tompkins, Charlotte, N.C., have developed such a plant as the above.

MERCHANT & CO., manufacturers of guaranteed tin roofing plates and other metal products, of Philadelphia, have found that their business requires an agency in Baltimore, and hereafter James Robertson & Co., of 17 South Charles street, Baltimore, will represent them and keep in stock all the brands of guaranteed roofing plates for which this firm is well known. Orders sent to Baltimore will receive the same attention that they would receive at any of the other offices of Merchant & Co.

THE Heisler Electric Light Co., of St. Louis, report recent contracts from the following companies for their long distance incandescent electric-lighting apparatus: Staten Island Light, Heat & Power Co., Port Richmond, Staten Island, N.Y.; Complete Electric Construction Co., Union Hill, N.J.; Johnstown & Gloversville Gas Light Co., Johnstown, N.Y.; Germantown Electric Light & Power Co., Germantown, Pa.; The Electric Light Co., Milledgeville, Ga.; Messrs. Rheubottom & Bond, Union City, Mich.; Pierre Electric Light & Power Co., Pierre, South Dakota.

MUCH of the special machinery required in the South is now manufactured there. Among these manufacturers are Talbot & Sons, of Richmond, Va., with branches at Macon, Ga., and Charlotte, N.C., whose advertisement will be found in another column. This firm manufacture engines and boilers, saw, corn and wheat mills, timber gauges, shafting, hangings, pulleys, cotton-seed oil mill machinery, modern cotton ginneries, and other machinery. Correspondence with parties contemplating using these kinds of machinery is solicited, when estimates will be made, and contracts taken for furnishing complete outfits for any of these mills.

THE calendar sent out by the Detroit (Mich.) Heating & Lighting Co. is an attractive one, with its colored picture of an English coach and its three horses. Surrounding the picture are cuts of the Bolton hot water heater, for heating homes and other buildings, and with brief descriptions of its special advantages and claims; also of the combination gas machine manufactured by this company. No well-regulated home can be complete without satisfactory heating and lighting arrangements. These are obtained by using the goods of this company. Full particulars regarding either appliance can be had upon application to the company.

A MATTER of vital importance to every city and town in the South is that of a pure and healthful water supply. And after such a supply is obtained it needs careful attention to prevent contamination. Stagnation defiles the best water. Agitation purifies and keeps pure the water. An excellent system to protect the water supply is said to be the West System, the headquarters of which are 280 Broadway, New York. Parties interested in water supplies should send for two pamphlets regarding this system, one entitled Agitation versus Stagnation, the other the West System of Water Purification by Natural Filtration and Aeration for Cities and Towns. The cost of this system is small compared to the results obtained, and its simplicity and practicability will at once recommend it.

PRICES on plain, simple, serviceable steam-power outfits that can be sold cheap, also on second-hand machines used in woodworking, are asked for in another column by the Florida Iron & Wood Works at Apopka, Fla. This company offer special bargains in cheap and serviceable saw mills and saw machines.

THE S. A. Woods Machine Co., of 172 High street, Boston, Mass., whose advertisement will be found in another column, inform the MANUFACTURERS' RECORD that they were never so busy at their works as at present, and they are having an excellent trade in the South. Their agent, who is down there now, is securing many orders.

WE have received a very neatly colored chromo of an attractive female face. In one corner of the picture is printed, "Fresh as a Daisy"—after a night's ride in the electric-lighted vestibule sleepers, the finest trains on earth running between Cincinnati, Indianapolis and Chicago via the C. H. & D. and Monon Route; the only line with dining car on the day train. If the passenger service of this route is as good, comparatively, as the chromo is, it is exceedingly good.

J. A. V. SMITH, Manchester, N.H., is having great success with his patent coil springs when applied to either old or new speeder fliers. He has changed from the old watch spring to his patent coil spring for Amoskeag Mills more than 50 sets within 8 months, and changing still. He has just begun to change 40 or more sets from the watch spring to his coil spring for Hamilton Mills, Lowell. He has never put on a set of these springs on either old or new fliers without giving entire and acknowledged satisfaction.

WITH the increased high pressure in the use of steam, more exacting regulations regarding safety appliances are demanded by both municipal and national governments. Among these appliances, which have come into popular demand, is the lock-up "pop" safety valve, manufactured by the Ashton Valve Co., of 271 Franklin street, Boston, also of Chicago and New York, which will be found advertised in another column. The Navy Department has introduced this company's marine valves, ordering in February alone \$1,000 worth. A recent stringent regulation regarding steam at Chicago has created a large demand for these valves. But the bulk of the business done by the Ashton Co. is with railroad companies and locomotive manufacturers. These peculiar demands for the Ashton valve come from the very best class of buyers, and are the highest kind of a recommendation. Further information regarding them can be had upon application to the company.



SHIELDS & BROWN CO.

143 Worth St., NEW YORK. 240 and 242 Randolph St., CHICAGO.



Improved Screw Cutting
FOOT AND POWER LATHES

\$175. Drill Presses, Shapers, Band, Circular and Scroll Saws, Machinists' Tools and Supplies. Lathes on trial. Catalogue mailed on application.

THE SEBASTIAN-MAY CO.

182 West Second St., CINCINNATI, O.

Menasha Hard Wood Pulleys.

We are sole makers of hardwood bent rim, oak spoke arm Pulleys; gripped to shaft with bolts, and using patent paper bushings. They can be put onto shaft without taking it down or cutting keyseats. No glue or nails used in their construction. Hub with bushing fits any size of shaft.

Also sole makers of only small Split Pulley 1 inch to 8 inches in diameter, in the market. See above cuts of them. No glue or nails in them. No Keyseats to cut. Also sole makers of only Split Loose Pulley in the market, with gun metal metaline bushing. Send for circulars and discounts of Menasha Pulleys.

MENASHA WOOD SPLIT PULLEY CO., Menasha, Wis.

Branch Houses: Hoen & Von Kapp, Baltimore, Md.; Lodge & Davis Mach. Tool Co., New York City; H. N. Bates & Co., Boston; Chas. A. Turner, Pittsburgh, Pa.; Greene & Wood Mfg. Co., Philadelphia; W. D. Allen & Co., Chicago and Minneapolis; E. L. Cole, New Orleans, La.; Thos. J. Bell & Co., Cincinnati; L. M. Rumsey Mfg. Co., St. Louis.

The Acme Dry-Steam Blower

FOR ROLLING MILLS.

THE GREATEST INVENTION OF THE AGE.

McCoy Patent, January 14, 1890.

IRON MANUFACTURERS MAY WELL REJOICE OVER THIS GREAT DISCOVERY.

Twenty-five per cent. of coal actually saved, quality of the iron greatly improved, grate bars preserved for years, reduces clinkers and prevents them from adhering to brickwork, thereby making an enormous saving in firebricks and labor. Ten heats can be turned out in 2 hours, owing to the great condensed heat diffused throughout the entire furnace. It can be used whenever a forced blast is required and is especially applicable to

HORIZONTAL TUBULAR BOILERS.

FOR FURTHER PARTICULARS ADDRESS

THOS. FAHY, 248 BROAD STREET, ROME, GA.

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Contractor & Builder **Water and Gas Works,**
OF
CAPITAL OBTAINED FOR RAILROAD and OTHER ENTERPRISES.

418 Walnut St., Rooms 67 and 68,

PHILADELPHIA, PA

Specifications and Estimates furnished.

WM. SIMPKIN A. S. M. E. **SIMPKIN & HILLYER,** ENGINEERS AND CONTRACTORS **RICHMOND, VA**

E. G. HILLYER, M. I.

Manufacturers of and Agents for Steam Engines, Boilers, Pumps and Heavy Machinery. Economical Steam Plants, Rope and Belt Driving. Special Machinery for Chemical and Fertilizing Works, Gas, Water and Creosote Works. A specialty of the "Warwick" Pole Road Locomotive, "Warwick" Tram Road Locomotive, and the "Warwick" Silent Steam Street Motor. Castings furnished. Repair work solicited. Consultations, Arbitrations and Valuations.

Engines indicated. Plans, Specifications and Estimates prepared. Correspondence invited.

WORKS—Newport News, Va.

GENERAL OFFICE—1105 Main St., Richmond, Va.

SEND ALL REPAIRS TO OUR WORKS.

HERMANN SCHMIDT, President.

E. A. CATLIN, Secretary and Treasurer.

W. SIMPKIN, Vice-President and Gen. Agent.

THE RICHMOND ICE-MACHINE CO.

Manufacturers of the Most Improved

Ice-Making and Refrigerating Machinery

ON THE COMPRESSION PLAN.

We guarantee the proper working of our machinery. All working parts built to gauge, so they can be readily duplicated, and nothing but the very best material used. Specifications and estimates furnished. Correspondence solicited.

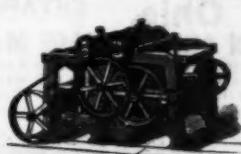
P. O. Box 315.

GENERAL OFFICE 1105 MAIN STREET, RICHMOND, VA.

Send for our Pamphlet "How to Make an Ice Factory Pay."



No. 2½—Pacific Planer and Matcher.



No. 4½—Smoothing Planer.



Horizontal Borer.



No. 3—Self-Feed Rip Saw.



No. 3—Molding Machine.



No. 2 Fret Scroll Saw.

W. H. DOANE, Pres't.

J. A. FAY & CO.

CINCINNATI, OHIO.

D. L. LYON, Sec'y.

Manufacturers of
PATENT**Improved Wood-Working Machinery**

OF EVERY DESCRIPTION,

For Planing Mills, Sash, Door and Blind Shops, Furniture, Carriage and Wagon Factories,
Spoke, Wheel and Agricultural Works, Car Shops, etc.

No. 2 Band Saw.

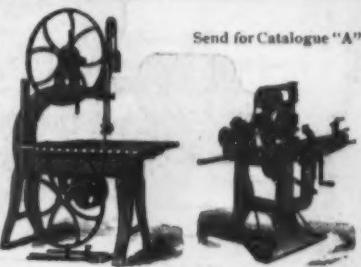
Awarded "GRAND PRIX" at the Great PARIS EXPOSITION of 1889.

Every Machine Tested and Warranted.
Send for Circulars and Estimates.**Wood Working
Machinery**

COMPLETE OUTFITS FOR PLANING MILLS

H. B. SMITH MACHINE CO.Send for catalogue and visit our extensive
warehouses if possible.**925 MARKET STREET.**

PHILADA, PA., U. S. A.

Established 1840. **HENRY DISSTON & SONS,** Incorporated, Established 1840.**Keystone Saw, Tool, Steel and File Works,**
PHILADELPHIA, PA.**Every SAW****Fully Warranted.****\$250 WILL BUY THE BEST****SAW MILL**
FOR THE MONEY. Send for Descriptive Circular.
RICHMOND MACHINE WORKS,
RICHMOND, - - INDIANA.

Send for Catalogue "A"

BRANCH HOUSE:
Cor. Randolph and Market Streets,
CHICAGO, ILL.Send for Price List and Discount Sheet and
New Illustrated Edition of Files.WE have always taken the utmost care
in the manufacture and inspection of
our steel and saws, have always
headed the list of saw manufacturers, and,
we are happy to say, that after years of careful
study and expensive experimenting, our
efforts have been crowned with the Greatest
Success of the Age, as our Method of Casting
Steel Ingots and Process of Compressingthem does away with the splitting and spalling
of teeth, makes a hard, tough and elastic
steel of the highest quality, which, with our
improved and patented process of manufac-
turing and tempering enables us to furnish
our patrons with saws that for Toughness,
Standing-up Quality, Uniformity of Tem-
per, and general superiority,**BRANCH HOUSE:**
923 West Main Street,
LOUISVILLE, KY.Send for New edition of Lumberman's Hand
Book and Sawyer's Pocket Edition.**Wood-Working Machinery****SHAFTING, PULLEYS AND HANGERS.**

Subscribe to the MANUFACTURERS' RECORD.

BUFFALO SCALE CO., Buffalo, N. Y. Headquarters for **RAILROAD TRACK SCALES** and all other Scales.

DEFIANCE MACHINE WORKS, Defiance, Ohio.

Manufacturers of HUB, SPOKE, WHEEL, BENDING, WAGON AND CARRIAGE MACHINERY,

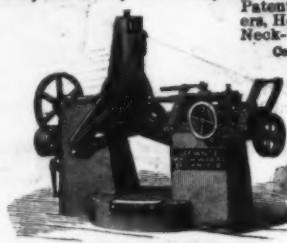
ESTABLISHED 1850.

Patent Plow-Handle Benders, Shapers, Cut-Off Saw and Revolving oil-shakers, Hot-Furnace, Double and Single Bent Pole and Express Shaft Benders, Neck-Yoke, Singletree, Brush Handle Lathes and Finishing Machines.

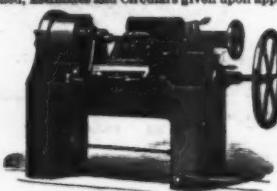
Complete Outfits Furnished, Estimates and Circulars given upon application.



Patent Automatic Combined Spoke Turning and Squaring Machine for
concentric, square, patent, or short-
eared spoke turning. Capacity 2,600
per day.



Wheel Boxing Machine.



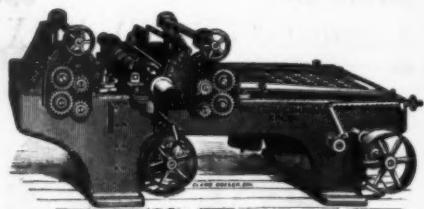
Patent Hub Turning Machine.



Patent Automatic Double-Chisel Hub Mortising Machine. Built in three sizes.

WOOD-WORKING MACHINERY.

SEND FOR A CATALOGUE AND
SPECIAL LOW PRICES.

**COMPLETE OUTFITS**

For Planing Mills, Sash, Door and Blind Factories,

170 Carriage, Wagon and Carpenter Shops, &c.

THE EGAN COMPANY

228 to 248 W. Front St., Cincinnati, O., U.S.A.

Established 1874.

MANUFACTURERS OF
Taper Shank Drills,
Straight Shank Drills,
Blacksmith Drills,
Bitstock Drills,
Straight Fluted Drills,
Machine Bit Drills.

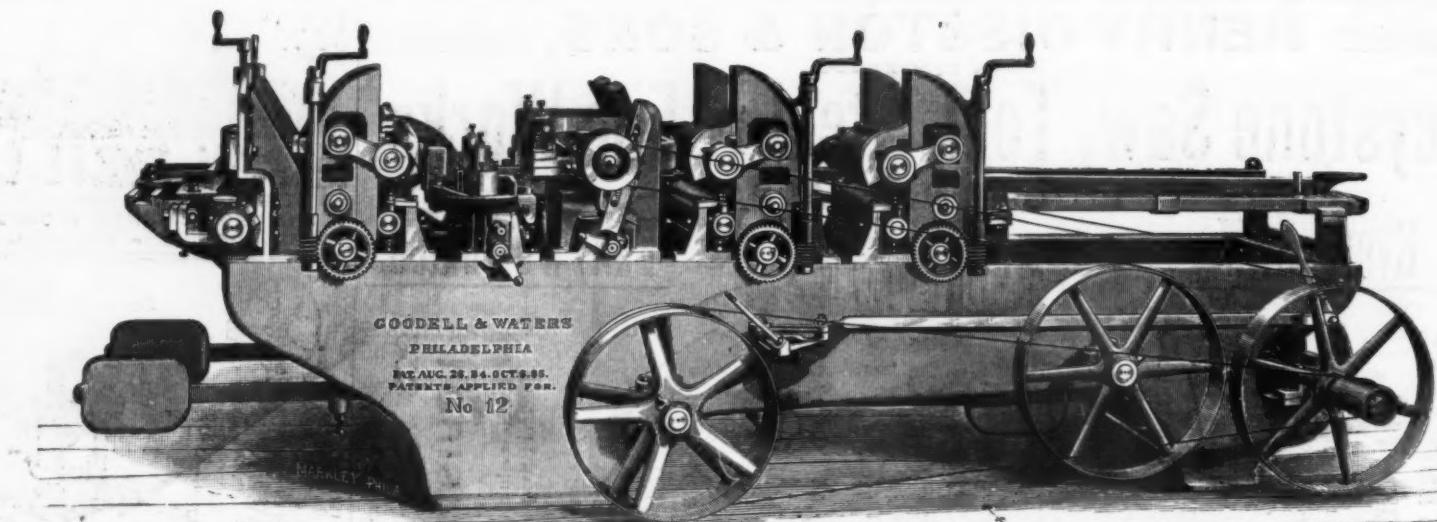
Cleveland Twist Drill Co.

Send for Catalogue.

OFFICES— Cor. of Lake & Kirtland Sts., Cleveland, O. MORTON, REED & CO. BALTIMORE.

MAUFACTURERS OF
Self-feeding Reamers,
Expanding Reamers,
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Stay-bolt Taps,
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No. 12 Six-Roll Planer and Matcher.



ANOTHER SPECIALTY of a series of new machines that are eminently successful. The No. 12 is pronounced by one of the leading mill men of Philadelphia to be the easiest running and most conveniently adjusted machine on the market. Cheap machinery is costly in the long run. We pride ourselves on excellent workmanship, perfect designs and the best materials obtainable; all that goes to make the quality of our product. We are having a lively run on this machine, and you will be satisfied that our claims to superiority are well founded, when you examine the merits and good points about it. We solicit your correspondence.

GOODELL & WATERS,

IN THE WEST

Chicago and San Francisco.

MAKERS.

3002 Chestnut Street, PHILADELPHIA.

The Standard Improved Dry Kiln.



RADICAL IMPROVEMENT IN APPARATUS.

Ample Provision for Expansion of Pipes.

NO LEAKS. NO STRAIN.

The most PRACTICAL and EFFICIENT "BLOWER KILN" that is made. Send for NEW CATALOGUE and Testimonial Letters, which substantiate the above statement. Satisfaction guaranteed. Payment contingent on fulfillment of guarantee.

PRICES LOW. TERMS EASY.

The Standard Dry Kiln Co.

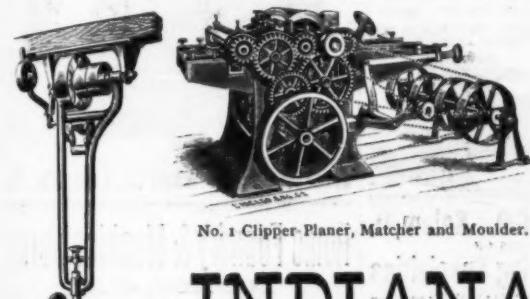
PATENTED AND SOLE MANUFACTURERS,

1224 to 1230 West Main Street;

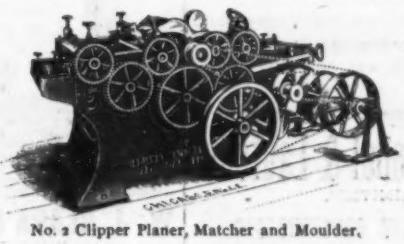
LOUISVILLE, KY.

SAWS THE "BARRY" BAND

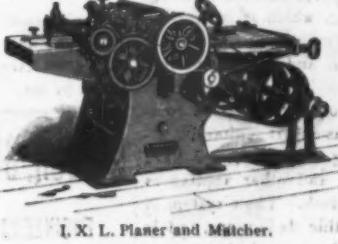
And the "BARRY" CIRCULAR SAWS
Manufactured by W. B. BARRY SAW & SUPPLY CO., Nos. 124 to 135 S. Penn Street, INDIANAPOLIS, IND.



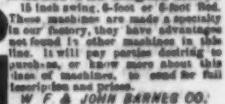
No. 1 Clipper-Planer, Matcher and Moulder.



No. 2 Clipper Planer, Matcher and Moulder.



L. X. L. Planer and Moulder.



Barnes' Pat. Engine Lathe

15 inch swing, 6-foot or 8-foot bed.

These machines are made a specialty

in our factory, they have advantages

over all other engines of the same class.

It will pay parties desiring to

purchase, or know more about this

kind of machine, to send for full

descriptions and prices.

W. F. & JOHN BARNES CO.

221 Hub St., Rockford, Ill.

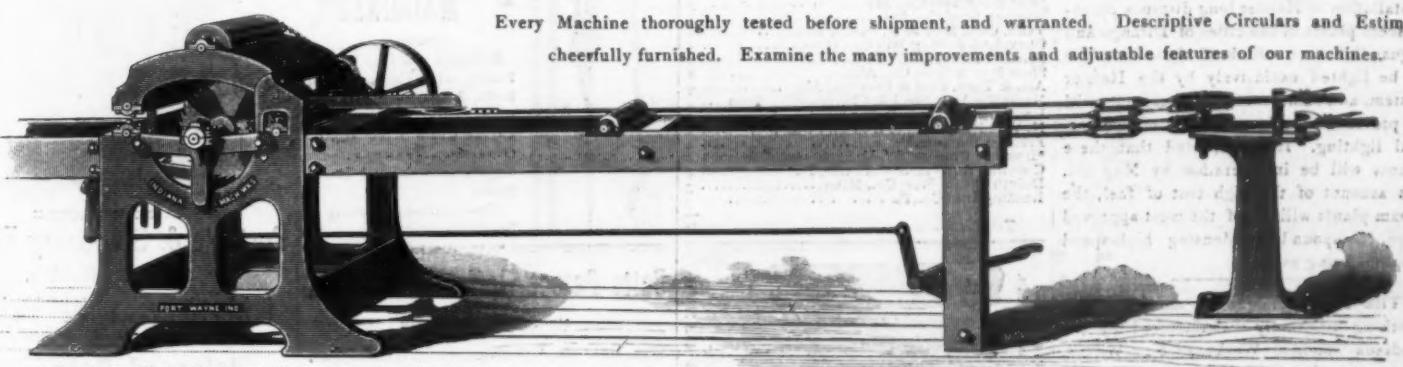
INDIANA MACHINE WORKS, FORT WAYNE, IND.

BUILDERS OF

Wood-Working Machinery,

* Unsurpassed in Design, Construction and Convenient Adjustments. *

Every Machine thoroughly tested before shipment, and warranted. Descriptive Circulars and Estimates cheerfully furnished. Examine the many improvements and adjustable features of our machines.



Improved Gang Edger. 24 inch and 30 inch. Frame cast in one piece.

The Caldwell Patent Spiral Steel Conveyor

MADE OF STEEL, DOUBLE BOLTED, DOUBLE COLLARED AND EXTRA STRONG COUPLINGS.

Specially Adapted to use in Handling Cotton Seed and all its Products, Fertilizers and Phosphates.



— DEALER IN —

Mill and Grain Elevator Supplies.

H. W. CALDWELL & SON, 181 and 182 West Washington Street, CHICAGO, ILLINOIS.

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TRADE NOTES.

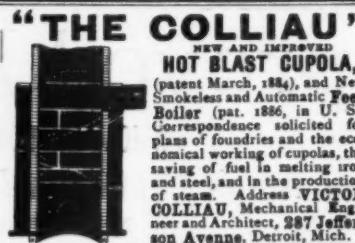
ADDITIONAL orders for a quantity of Mason air-brake regulators have been received by the Mason Regulator Co., of Boston, from the Eames Vacuum Brake Co. The B. & A. and Fitchburg Railroads have each over a hundred of these regulators on their air-brake pumps. The tests made on other railroads, including the B. & O. and Pennsylvania, were very satisfactory.

THE catalogue of the motors and other products manufactured by the Backus Water Motor Co., of Newark, N. J., is at hand. This motor is made in various sizes to furnish from an 8 to 10 horse-power. It is economical and a perfect governor for driving all kinds of light machinery. The fact that over 15,000 of these motors are in actual use is sufficient to guarantee its working qualities. The motors are made in innumerable shapes and adapted to all sorts of uses. This company also manufacture patent exhaust, ventilating, rotating and column fans. These fans are made to suit all possible uses and adapted to all conditions. The catalogue is complete in its descriptions of all those machines. Copies can be had upon application to the company.

THE Akron (Ohio) Heating & Ventilating Co. send out a pamphlet entitled Heating, Ventilation, Cooling, which is interesting reading to any business man. These are three vital subjects, and would interest every business man in reference to his home, store, office or factory. This company are organized as expert sanitary, heating and ventilating engineers, and have devised mechanical and other appliances to carry out their work. Their system is the result of scientific deductions, and is effective, cheap and economical. Among other manufactures of this company is the Akron aluminium fan, which is very light weight. It is claimed for this fan that it saves fifty per cent. in power. Aluminium is also used by this company in making exhaust disk wheels for fans, ventilators, etc.

SOME notable shipments of electrical apparatus have just been made from St. Louis to the Republic of Mexico. The Heisler Electric Light Co. recently forwarded two car-loads of electrical apparatus, including dynamos, regulators, sockets, lamps, street and indoor fixtures, wire, insulators, pins, &c., &c., for the complete installation of Heisler long distance incandescent plants in the cities of Dirango and Aguas Calientes. Both of these cities are to be lighted exclusively by the Heisler system, and sufficient dynamo capacity will be provided for a large amount of commercial lighting. It is expected that these plants will be in operation by May 1st. On account of the high cost of fuel, the steam plants will be of the most approved type, compound condensing high-speed engines being used.

THE 1890 catalogue of modern wood-working machinery manufactured by the Indiana Machine Works, of Fort Wayne, Ind., is at hand. It is conveniently arranged and thoroughly illustrated with cuts of all the machines manufactured by this company, which include woodworking machines of all kinds, with accessories, such as steel shafting, hangers and couplings, wood and iron pulleys, belting, saws and planer knives. The cuts are very clear and distinct, and minutely depict the peculiar construction of each machine. In wood-working, as in every other business, the best results can alone be obtained by having the best and latest improved machinery. Such a catalogue as this is a necessity for reference purposes in any wood-working establishment. Copies can be had from the firm upon application.



JAS. P. WITHEROW.
ENGINEER & CONTRACTOR,
Furnace & Steel
Plant Construction.
PITTSBURGH, U. S. A.

Blast Furnaces and Steel Works designed and erected complete in every detail ready for operation. Special attention given to the manufacture of

* HEINE *
Safety Water Tube Boilers.

Owning an extensive manufacturing plant, I can guarantee promptness in execution, and satisfaction in any contracts undertaken by me.

Gordon, Strobel & Laureau,
(LIMITED),
ENGINEERS AND CONSTRUCTORS,
PHILADELPHIA, PA.
Blast Furnaces, x
x Steel Plants,
Fire-Brick Stoves, x
x Blowing Engines.

We are sole manufacturers of the GORDON-WHITWELL-COWPER FIRE-BRICK HOT-BLAST STOVE, and within four years have introduced them as follows:

Jefferson Iron Works, Ohio.....	4
North Chicago Rolling Mill Co., Ill.....	3
Joliet Iron & Steel Co., Ill.....	4
Missouri Furnace Co., Mo.....	2
Jupiter Furnace Co., Mo.....	3
Western Steel Co., Mo.....	3
Tenn. Coal, Iron & R. R. Co., Ala.....	18
Cheviot Rolling Mill Co., Ohio.....	4
Belmont Nail Co., W. Va.....	1
Sloss Iron & Steel Co., Ala.....	1
Ala. & Tenn. Coal & Iron Co., Ala.....	9
Nashville Iron, Steel & Charcoal Co., Tenn.....	4
Decatur Land, Iron & Furnace Co., Ala.....	2
N. V. & Perry Coal & Iron Co., Ohio.....	2
Princess Furnace, Va.....	4
*Irondale Furnace, W. Va.....	2
Cornwall Anthracite Furnaces, Pa.....	4
Duluth Iron & Steel Co., Minn.....	3
Reading Iron Co., Pa.....	3
Total	85



American Screen Wire Holder
Patented April 17, 1888, is manufactured by
JOHN HOSFORD, Monroeville, Ohio.
P. O. Box 96.
Arranged to hold seven rolls of wire of different widths; no trouble to load the holder with wire. Send for descriptive circulars and testimonials.

FOR
Ice-Making & Refrigerating
MACHINERY,

ADDRESS THE
Ring Refrigerating & Ice Machine Co.

OFFICE:
218 CHAMBER OF COMMERCE,
ST. LOUIS, MO.

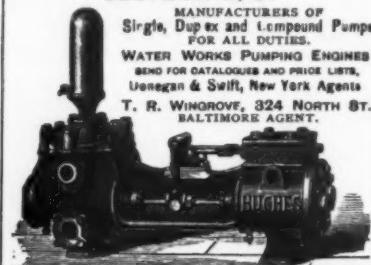
**DON'T BUY AN
ENGINE OR BOILER**

Until you have seen our circulars. Engines complete from 5 to 110 horse power, both Vertical and Horizontal, at prices below those of other reputable makers. \$1000 in use. Boilers of every style. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Drainage or Irrigation. Established 20 years. Perfect satisfaction guaranteed. Ask for Circular M and address

Morris Machine Works,
BALDWINSVILLE, N. Y.

HUGHES STEAM PUMP CO.
CLEVELAND, O.

MANUFACTURERS OF
Single, Duplex and Compound Pumps
FOR ALL DUTIES.
WATER WORKS PUMPING ENGINES
SEND FOR CATALOGUE AND PRICE LIST,
UNEGAN & SWIFT, NEW YORK AGENTS
T. R. WINGROVE, 324 NORTH ST.
BALTIMORE AGENT.



W. J. CLARK & CO., Salem, O.
MANUFACTURERS OF
Elevating & Conveying Specialties

Sole Manufacturers of the "SALEM" ELEVATOR BUCKET, for Mill and Elevator work. Ear Corn, Corn and Cobs, Ores, Coal, Broken Stone, &c. Send 9 cents postage on Sample Salem Bucket and Illustrated Catalogue.

Established 1867.

E. Harrington, Son & Co.
Works and Office,
N. 15th St. & Penna. Ave.
Phila., Pa., U. S. A.
Manufacturers of a full line of
Iron-Working
MACHINERY,
INCLUDING
Extension and Gap Lathes,
Planers with Quick Return,
Drills, &c., Hand Power Elevators with Patent Brake,
Double Chain Screw Hoists
OVERHEAD TRAMWAY, with
Switch, Turntable and Geared
Truck.
Gear Cutting a Specialty
Send for estimates.

Batts Patent Differential Hoist.

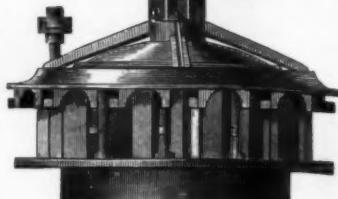
MANUFACTURED BY THE
Boston & Lockport Block Co.
162 Commercial St.
BOSTON.



The chief merits of this hoist that we wish to bring to the public notice is that it only requires
ONE MAN TO
Hoist the Load.

It is also far more compact, taking up less room than any other make, and will hold the load at any point. Send for circular and prices. Every hoist warranted.

SUCCESS
Water Wheel.



This Wheel is strong and durable. Exceeded all other wheels in the great trial tests. Is in use all over the nation. I also make a specialty of
HEAVY GEARING & MACHINERY
For Paper, Cotton and Grist Mills.
S. MORGAN SMITH, York, Pa.

**THE IMPROVED LANCASTER
Turbine Wheel.**

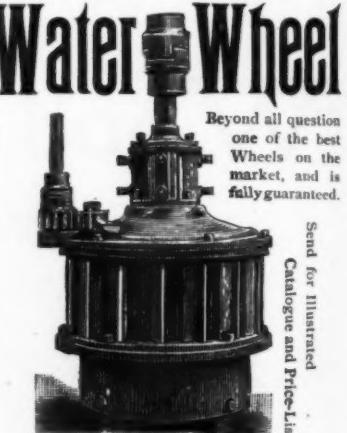


Lancaster Turbine Wheel Co. Lancaster, Pa.

**Rome Foundry & Machine Works,
ROME, GA.**

Manufacturers of the well known

DAVIS DOUBLE TURBINE



Beyond all question one of the best Wheels on the market, and is fully guaranteed.

Send for Illustrated Catalogue and Price-list.

ALSO MANUFACTURE

Portable & Stationary Engines

AND BOILERS.

Grist and Flouring Mill Machinery.

The Balanced Gate Turbine.

PAT. SEPT. 3, 1889.
High Percentage,
Great Simplicity,
CLOSE FITTING,
AND
EASY WORKING GATE
Under all Circumstances
Sold under Full Guarantee at Low Prices.
Send for Descriptive Pamphlet.

CHRISTIANA MACHINE CO., Christiana, Pa.
Makers of all kinds of Machinery for Transmitting Power. Perfect Goods Only.

To Men of Moderate Means.

THE WEST SALEM LAND CO.

Offers in its stock of "Class B" an Investment Capitalized at ONLY \$25,000, but which represents

400 TOWN LOTS, AVERAGING 50X150 FEET.

SHARES TEN DOLLARS EACH,

Payable in Five One-Dollar Instalments,

As follows: One Dollar at time of Subscription; One Dollar March 1st; One Dollar April 1st; One Dollar May 1st, and One Dollar June 1st; whereupon, a total of Five Dollars having thus been paid, the stock will be declared full Paid and non-assessable, and certificates of Ten Dollars par value will forthwith be issued.

This "Series B" stock is based upon one of the most desirable residential sections in the vicinity of Salem, lying on the slope of the "Twelve O'clock Knob" directly across Roanoke River, soon to be spanned by an iron bridge, which will bring these lots within ten minutes' drive of the center of the city of Salem.

into building lots and prepared for sale. The books on series A have been closed.

CLASS B. The company has purchased one hundred acres of land, known as the Baxter W. Logan land, lying on the south side of Roanoke river, opposite West Salem and they have stocked it under the provisions of their charter as series or Class B, at \$25,000. This "Class B" stock is now offered in shares of \$10 each, payable \$1 per share when the subscription is made, and \$1 per share on the 1st of March, April, May and June, making a total payment of \$5 per share, at which time the stock will be declared paid up and non-assessable and certificates of stock will then be issued.

The property in this company is stocked at a very moderate amount, and the stock will form a safe and profitable investment.

Property in Salem and the surrounding country is rapidly increasing in value, and as the growing prosperity is based on coal mines, iron ore, manufacturing industries of various kinds, with superior railroad facilities, all located in the midst of the very best climate, soil, water, mountain scenery and intelligent and thrifty population of southwest Virginia, values must continue to increase. The stock of this company will share in the general prosperity, and will at an early day be worth \$10 or more per share.

Applicants for stock in "Series B" will please remit \$1 per share to the West Salem Land Co., Salem, Va., whereupon receipt will be sent by return mail.

If further information be desired address

GEORGE ALLEN, President and Manager, or CHAS. C. TOMPKINS, Secretary, Salem, Va.

The Akron Blast System of Heating, Ventilating and Cooling.

This universal system is a happy combination of heating and ventilating in winter, and cooling the atmosphere during the heated summer months of private and apartment houses, public buildings, schools, hospitals, hotels, prisons, factories and mills.

Natural ventilation has been thoroughly tried and proven a failure; high shafts and

the cold fresh air, in hot weather, to various parts of the building or buildings under a slight pressure, varying from one quarter to one ounce over atmospheric pressure, and ventilating ducts to carry off the foul air by forced circulation.

The heater used is composed of several heaters or sections so arranged as to secure perfect condensation and circulation of steam, and the whole inclosed in a sheet steel jacket, through which the cold air is drawn and heated the desired temperature, then gently forced into every nook and

hours, and does not require skilled labor.

In theaters the small amount of space allowed for each person, in order to seat the largest number possible, is the means of producing a large amount of animal heat, which, with a theater once filled and warmed, makes the matter of cooling and ventilating to a comfortable degree a question of great moment, seated as audiences are for a number of hours; and as on matinee days the audience is hardly clear of the theater before another begins to assemble, it becomes necessary that a posi-

caused by the natural tendency of heated air to rise. The balcony and family circle receive air through the ducts G G at the terminus of the main flues in the proscenium wall and through the ducts G G and H in the wall A. The air is then discharged into the spaces shown formed by the ceiling of the boxes on the second tier and ceiling in the angle of the balcony at the walls. It is then forced to the edge of the balcony and family circle at A A and then through an opening at the back of every chair in the risers of the gallery, by means of which

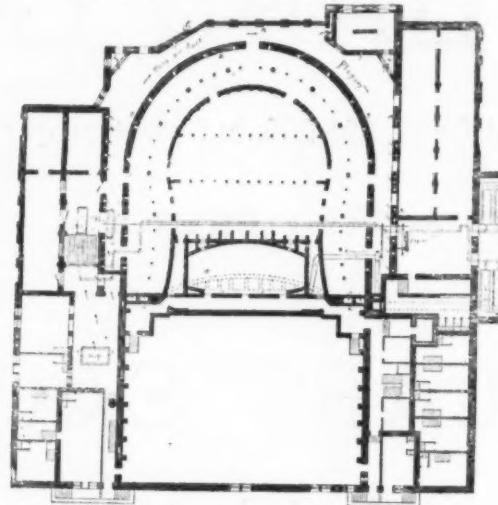


FIG. 1.

various forms of flues with fires at their base and other devices have been resorted to, all having proven unsuccessful. Unless the atmospheric conditions are most favorable these devices have been found to be actionless. Instead of carrying off the impure air they have confined it in the building, and the occupants have found their condition worse than before the delusive devices were constructed.

The Akron blast system can be successfully applied to either large or small buildings; in fact, any kind of a habitation, factory, mill or workshop, and the first cost, even with old buildings, is said to be no more than other systems of heating, while the cost of maintenance is, in most cases, much less; while add to this the fact of a perfect ventilation without draughts of cold air in winter or dangers of conflagra-

corner of the building heated, the exhaust ducts causing a perfect supply and circulation of pure air.

In summer by simply turning off the steam from the heater, and without any other alteration, the building can be constantly supplied with fresh air, maintaining a refreshing coolness and materially reducing the natural temperature. Cooling in summer has been considered a luxury; but with the Akron system, both heating and cooling plant costs less, it is said, than ordinary steam-heating plant with pipes, radiators, etc.

Where factories or mills are already constructed, to apply the Akron blast system it is only necessary to build one main flue on the outside wall reaching from the ground to top of the building, without defacing the structure, and lead mains of

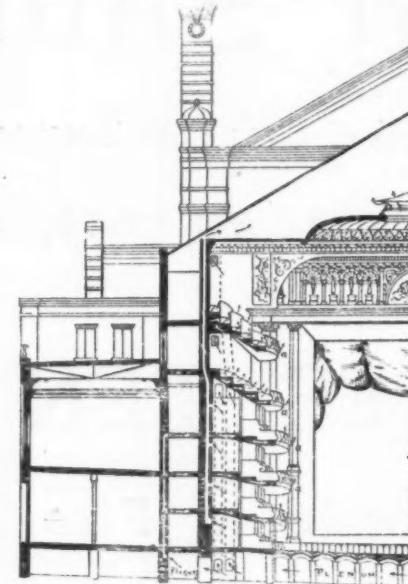


FIG. 2.

tive system should be adopted, as no reliance can be placed on any system that, beyond heating before the audience assembles, has no control over the atmosphere after they have entered the theater. Architects of late are devoting more attention to this matter than ever before, and are beginning to realize the fact that to insure success with the heating and ventilation of such buildings it is necessary to call in the aid of competent engineers who have made a life study of such work, which has already begun to show beneficial effects.

The sectional cuts shown herewith will give a good idea of the application of the Akron blast system to theaters. By reference to Fig. 1 a clear idea of the plan is obtained. Air is taken in a height to insure pureness, and yet not high enough to come in contact with the fumes from surrounding chimneys. The air passing down the shaft is drawn through the heater, and thence through the fan, and is forced into the air ducts and carried to the various parts of the building.

Fig. 2 shows a longitudinal section of

we are able to supply every stationary chair with pure fresh air. In fact so perfect is the designing of such buildings that every particle of pure air is guided and delivered at the exact spot where it is needed, and with the foul air, that being taken and forced through ventilating troughs to the outside of the building.

Figure 4 is a section through the private boxes, and shows the manner of applying the fresh air and exhausting the foul.

Figure 5 is a section through a private box.

A full treatise, handsomely illustrated, will be sent to any applicant by Akron Heating & Ventilating Co., Akron, Ohio.

THE NATIONAL PULLEY COVERING CO., OF BALTIMORE, HAVE RECENTLY RECEIVED THE FOLLOWING COMMUNICATION IN REGARD TO THEIR FRICTION COVERING FOR PULLEYS FROM THE WELL-KNOWN ORNAMENTAL IRON WORKS OF DAVID PETTIT & CO., PHILADELPHIA, WHICH SPEAKS FOR ITSELF:

National Pulley Covering Co.:

Gentlemen—Your pulley covering is all

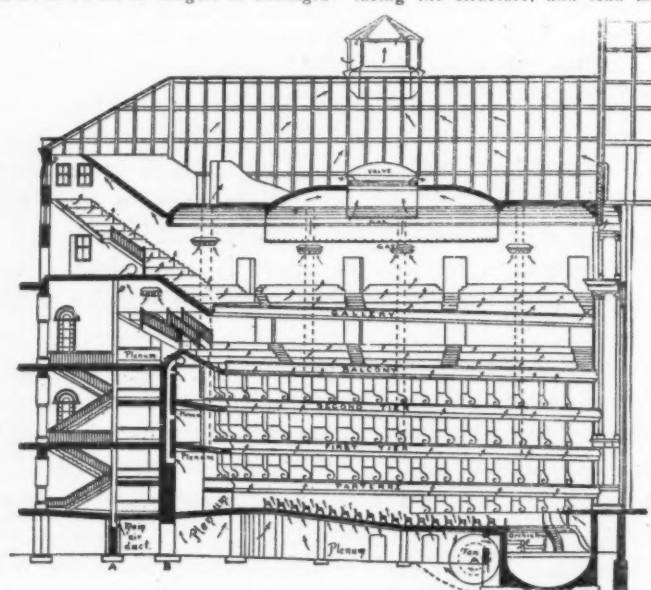


FIG. 3.

tion, coupled with the fact that it can be turned to good account during hot weather in tempering and reducing the heat, one will naturally put the question: "What is the Akron blast system and its construction?" To be brief, it is very simple, and consists of a heater and blower combined.

Pipes or ducts are constructed to conduct the fresh heated air, in cold weather, and

galvanized iron pipes of sufficient carrying capacity from it along and underneath the various floors.

The air is blown through the heater to the main flue and distributed throughout the building as desired, entirely under control. The pipes are thus entirely out of the way. The fan and heater is shipped in such shape that it can be set up in a few

theatre, and shows the method of furnishing the various parts with fresh air. That which supplies the boxes is carried from the main ducts to the flues in the wall A, and thence to the spaces between the floors and ceilings, as shown in Fig. 3, and discharged at the edge of the tiers A A. It then pursues an upward course to the flues in the wall B, these flues having a suction force

you claim for it. It is durable, and increases the power of the pulley at least 25 per cent.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South cannot find a better medium than the MANUFACTURERS' RECORD.

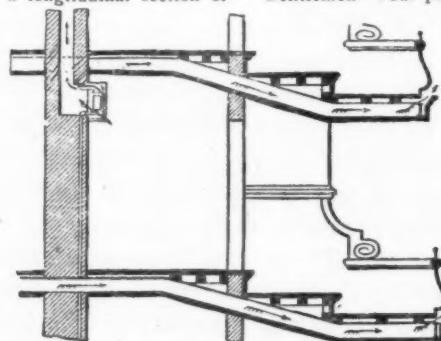


FIG. 4.

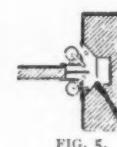


FIG. 5.

New Kodaks.

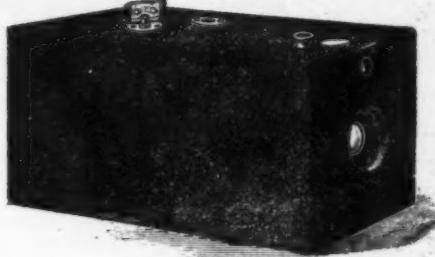
Stimulated by the great success of the original Kodak, the manufacturers (The Eastman Dry Plate & Film Co., of Rochester, N. Y.) have, after many experiments, succeeded in extending the Kodak principle to larger sizes.

The new Kodaks are made in a variety of styles and sizes, as described, to meet the various requirements of all classes of amateur photographers.

While the division of labor rendered possible by the Kodak, whereby the user is relieved of all the trouble of finishing his negatives, is a most important and original feature of the Kodak system, it must not be forgotten that with the new Eastman transparent film now supplied with the



NO. 1 KODAK.



NO. 2 KODAK.

The lens is "fixed focus," like that in the No. 1; it has wonderful depth and definition, and is guaranteed to work equal to any lens known.

The largest stop is used for instantaneous street work, the middle stop for interiors and the smallest for timed exposures out of doors.

No. 3 Kodak. For square pictures, $3\frac{1}{4} \times 4\frac{1}{4}$; capacity, 100 exposures without reloading; size of camera $4\frac{1}{4} \times 5\frac{1}{4} \times 11\frac{1}{2}$ or $268\frac{1}{2}$ cubic inches; weight loaded, 4 pounds.

The No. 3 Kodak is provided with two

Kodaks which make square pictures, and will be the favorite with those who make negatives with a special view to using them for lantern slide printing, and are not content with round pictures such as made with the No. 1 and No. 2.

No. 3 Kodak Junior. For square pictures, $3\frac{1}{4} \times 4\frac{1}{4}$; capacity, 60 exposures without reloading; size of camera, $4\frac{1}{4} \times 5\frac{1}{4} \times 9$, or 210 cubic inches; weight loaded, 3 pounds.

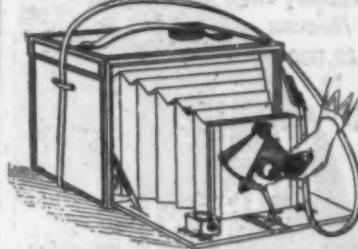
This camera is substantially the same as the No. 3, except that it has a capacity for 60 exposures only, and is $2\frac{1}{2}$ inches shorter, a more compact camera for those who want the smallest possible camera that will make a $3\frac{1}{4} \times 4\frac{1}{4}$ picture. The No. 3 Junior takes a $3\frac{1}{4}$ -inch spool, making the negative the other way of the film from the No. 3, which takes a $4\frac{1}{4}$ -inch spool.

No. 4 Kodak Junior. For square pictures, 4×5 ; capacity, 48 exposures without reloading; size of camera $5 \times 6\frac{1}{4} \times 10\frac{1}{2}$, or 326 cubic inches; weight loaded, $3\frac{1}{2}$ pounds.

This camera is substantially the same as the No. 4, except that it has a capacity for 48 exposures only, and is $2\frac{1}{4}$ inches shorter,

vided with a Bausch & Lomb Universal Lens (list price \$28). Special new Kodak shutter, having rotating stops and adjustable speed, reversible finder, socket for tripod screw and focusing index.

No. 5 Folding Kodak. For 5×7 pictures; capacity, 48 exposures without reloading; size camera (folded) $6\frac{1}{4} \times 7 \times 9$, or 393 cubic inches; weight loaded, $5\frac{1}{4}$ pounds.



NO. 5 (5X7) FOLDING KODAK, OPEN.

This camera is exactly the same as the No. 4 Folding Kodak, except the size. Bausch & Lomb Universal Lens (list price \$34). Special Kodak shutter, having rotating stops and adjustable speed, reversible finder, socket for tripod screw, focusing index and shoulder strap.

The Lagonda Lawn Mower.

The Lagonda lawn mower, which is advertised elsewhere in this paper, is manufactured by the Superior Machine Co., Springfield, Ohio, and is now offered generally to the trade. The manufacturers claim that it has less parts than any other



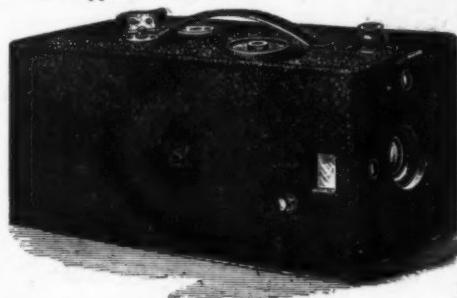
KODAK CARRYING CASE

making a more compact camera for those who want the smallest possible camera that will make a 4×5 picture.

The No. 4 Junior takes a 4-inch spool and makes the negative the other way of the film from the No. 4, which takes a 5-inch spool.

The carrying cases for all the Kodaks (except the Folding Kodaks, which are self-contained) are made from the best sole leather, and are hand-sewed.

The cases are not disfigured by any openings for fittings, and when closed present no appearance of the conventional camera carrying case. They are neat, ele-



NO. 3 AND NO. 4 KODAK.

Kodaks, it is just as easy for the amateur to finish his negative himself as when using glass plates.

No. 1 Kodak. For round pictures, $2\frac{1}{2}$ inches in diameter; capacity, 100 exposures without reloading; size of camera, $3\frac{1}{4} \times 3\frac{1}{4} \times 6$ inches, or 73 cubic inches; weight loaded, 1 pound 8 ounces.

This is the original Kodak, and it will always continue to be the note book of photography. It is the most compact camera in existence, being hardly larger than an ordinary field glass. It makes a picture plenty large enough for most pur-



NO. 5 15 X 7 FOLDING KODAK CLOSED.

gant and substantial.

No. 4 Folding Kodak. For square pictures, 4×5 ; capacity, 48 exposures without reloading; size of camera (folded) $7 \times 5 \times 5\frac{1}{2}$, or $192\frac{1}{2}$ cubic inches; weight loaded, 3 pounds 9 ounces.

This is an entirely new style of Kodak,

mower, and that its construction is much simpler. Among its advantages, as claimed, is the positive force clutch, herewith shown, and the fact that it is nearly three inches narrower than other machines for same width of swath. It is further said of

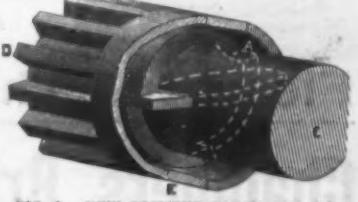


FIG. 1.—THE LAGONDA LAWN MOWER.

it that it is easily adjusted and kept in good cutting condition, and that it is constructed with special reference to ease of cutting, and that any child can readily operate it and keep any lawn in fine and smooth condition; also that it is made of



NO. 3 AND NO. 4 KODAK JUNIOR.

poses, and one that can readily be enlarged to any size.

No. 2 Kodak. For round picture, $3\frac{1}{4}$ inches diameter; capacity, 100 exposures without reloading; size of camera, $4\frac{1}{4} \times 5 \times 9$ inches, or 202 cubic inches; weight loaded, 2 pounds 12 ounces.

This new Kodak is provided with a finder and a set of three stops for the lens.

finders, one for horizontal and one for vertical pictures. Bausch & Lomb Universal Lens (list price \$24). The new Kodak has an instantaneous shutter, having rotating stops and adjustable speed, rack and pinion for focusing, two sockets for tripod screws when used for vertical or horizontal time exposures.

The No. 3 Kodak is the smallest of the

embodiment of the Kodak principle, but folding up into about two-thirds the space. It is self-contained when closed, and can be opened and focused in two motions. It is the most compact and simple folding camera ever made, and can be used either for tripod or detective work. It is pro-

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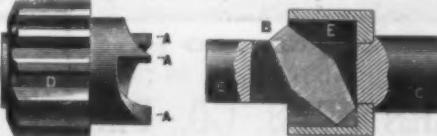


FIG. 3.—SECTIONAL VIEW OF AXLE, SHOWING RELATIONS OF CLUTCH AND WHEEL.



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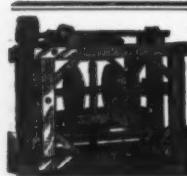
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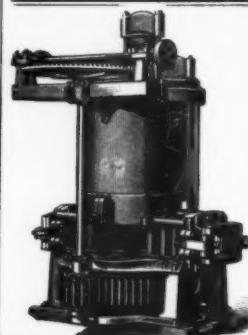
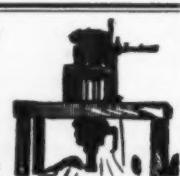
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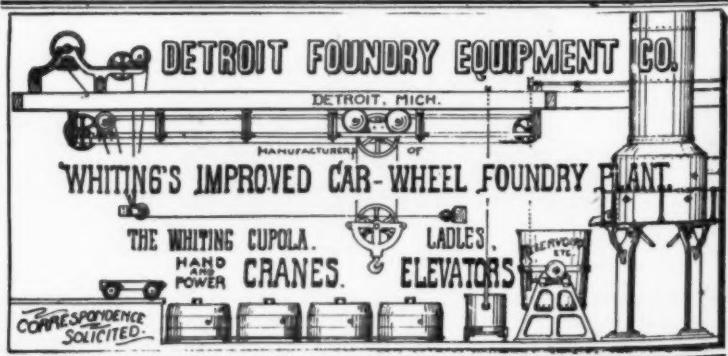
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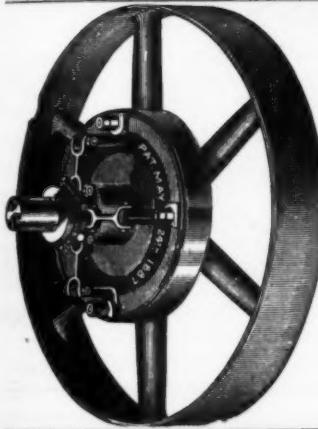
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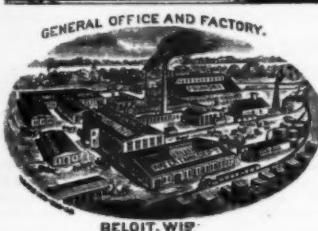
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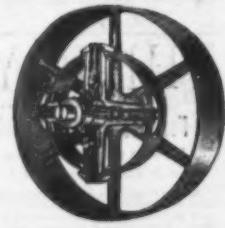
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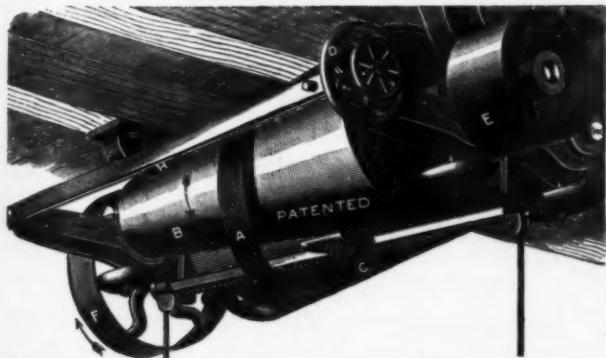
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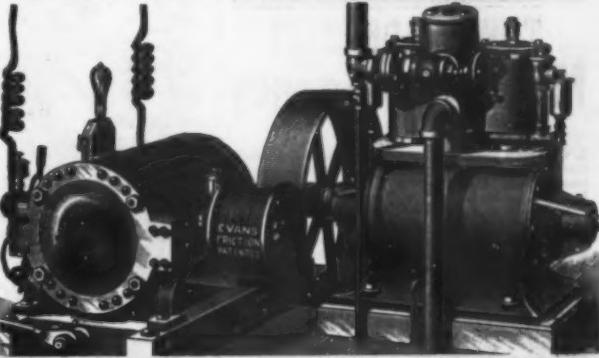
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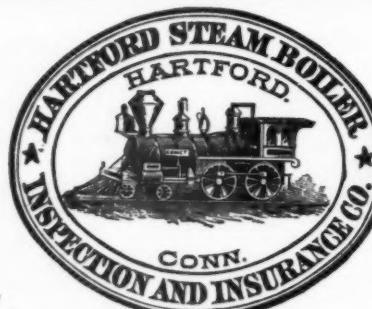
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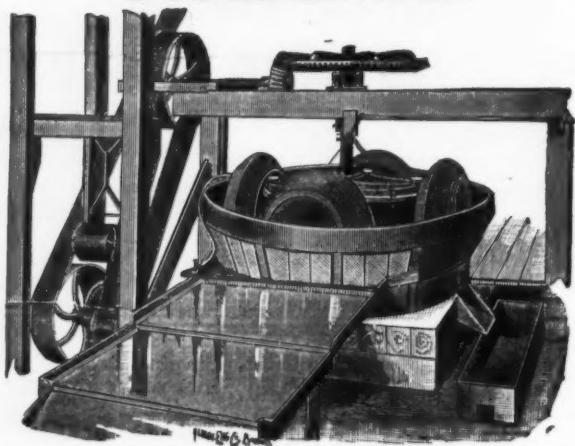
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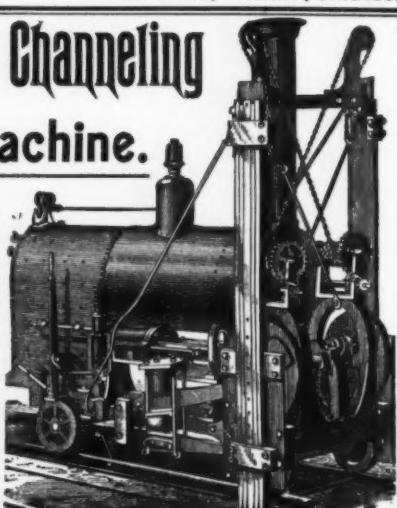
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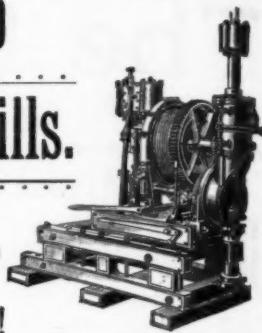
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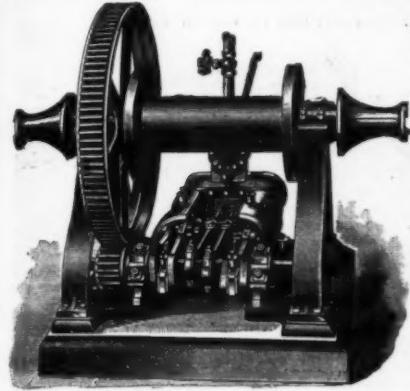
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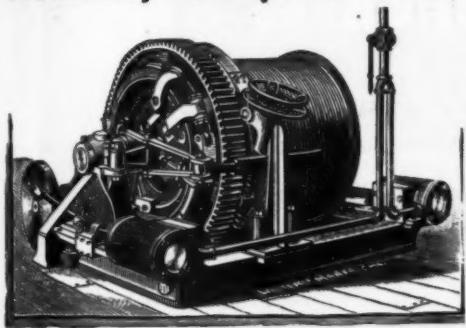
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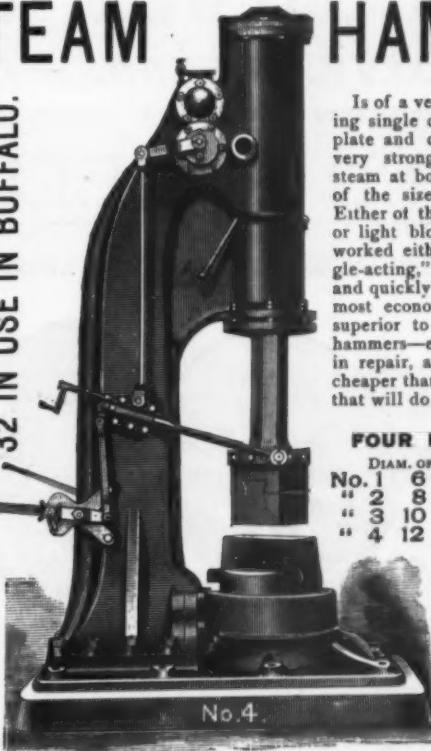
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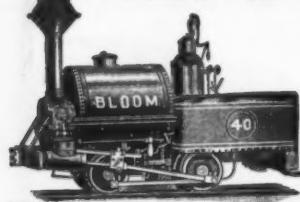
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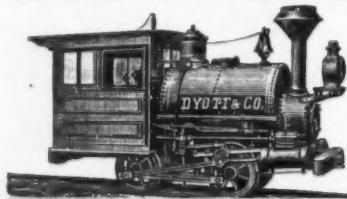
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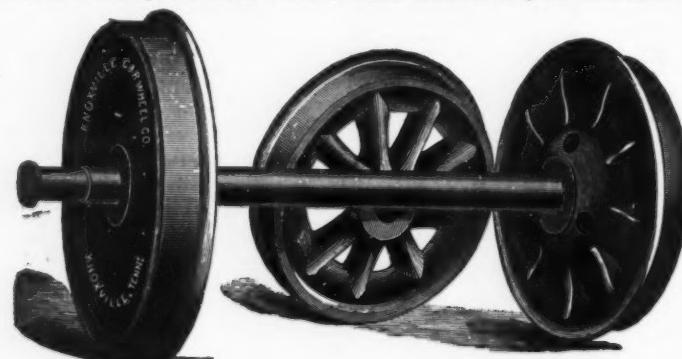
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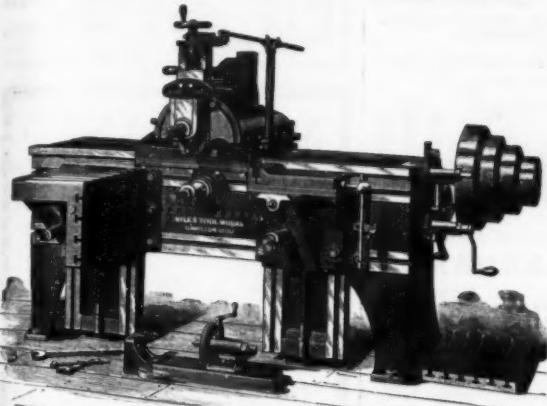
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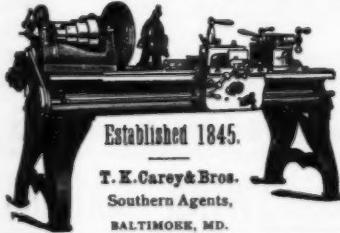
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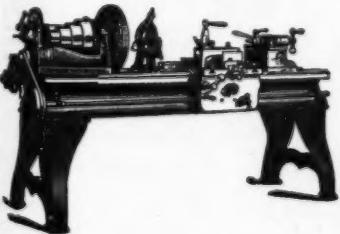
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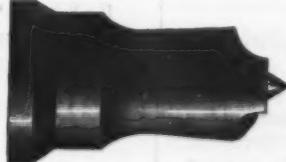


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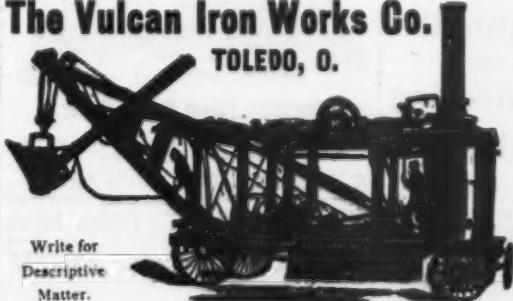
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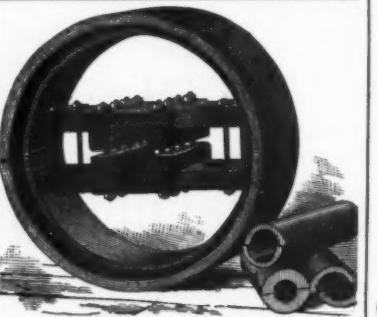


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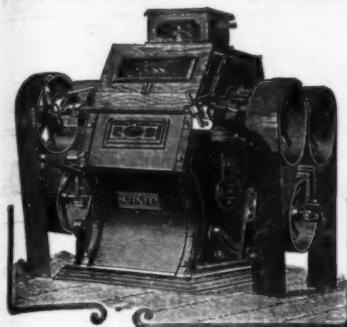
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Thanking you for the prompt and efficient manner in which you furnished my machinery in so short a time, after so great a loss and damage by fire burning your works, and with the best of wishes I remain,

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THE CASE MANUFACTURING CO., Columbus, Ohio.

FORT PAYNE'S PROGRESS.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

FORT PAYNE, ALA., March 7, 1890.

While the "Electric City" is having no boom, business is moving forward in a very satisfactory manner. Everything is in a prosperous condition, business is good but not brisk, and the city is growing very rapidly.

The principal movement just at the present time is in the direction of house-building. Land owners are beginning to realize that the demand for houses must necessarily far exceed the supply within the next four months, and this has encouraged the building boom. Many good houses are now in course of construction. The class of residences going up is far superior to the houses heretofore constructed. As fast as the frames are put up the owners have many applications from good tenants who are anxious to rent. The Alabama law on the question of rents is very strict. It gives the landlord a lien on all the personal effects of the tenant until the entire amount of rent has been paid for the full term for which a house has been rented. The tenant has no exemption and there is only one claim that can come in in advance of the rental account, and that is, State taxes. This makes the investment for the landlord absolutely safe.

When all of the industries now building are once in full operation, they will give employment to 3,800 men. This means an addition to our population of not less than 10,000 people, and the number ought to reach 12,000. This, added to our present population, will give us over 15,000 permanent residents inside of the next year. To accommodate this number of people, not less than 1,500 houses must be erected between now and next December. The readers of the MANUFACTURERS' RECORD must see that there is a wonderful amount of work yet to be done to barely accommodate the people who must locate here even before our industries can all be put into successful operation.

Even with such brilliant prospects ahead, real estate is not held at fancy figures. A business lot on the northeast corner of Main street and Gault avenue, one of the best locations in the city, sold for \$200 per front foot last week. The lot has a frontage of 100 feet on each thoroughfare, and was purchased by M. W. Howard, the prosecuting attorney of Kalb county, who is a native Southerner. Mr. Howard is going to erect a three-story brick block on this lot. It will be one of the finest buildings in the city.

Mr. Robinson, of New England, has just purchased several business lots on the west side of Gault avenue, between Ford and Vine streets, for which he paid \$175 per front foot. The location of these lots are regarded as "gilt-edged."

Residence lots are selling all the way from \$300 to \$1,000 each, according to size

and location. Investors who are building a good class of tenement houses are renting their property so that it brings them an income of from 12 to 30 per cent. per annum.

The stock of the Bay State Furnace Co. has practically all been taken, and work will be begun on the second furnace inside of the next twenty days. This furnace will be a 100-ton plant, and is to cost \$125,000.

Furnace No. 1 is progressing satisfactorily; but on account of the delay in the shipment of a portion of the machinery, it is doubtful if the furnace is ready to blow in before the 1st of May.

The machinery for the rolling mill is arriving daily. The main building is about one-half under roof, and it would have been almost completed by this time had it not been for the delay in the shipment of the timbers for the heavy framework.

The latest discovery made by the Fort Payne Coal & Iron Co. is an immense vein of brown ore, located only 1,000 feet west of Furnace No. 1. This vein promises to show a face of from 10 to 14 feet, and Prof. Brainerd, of Birmingham, says it is the most valuable vein of brown ore ever discovered in the State. He thinks it will analyze at least 62 per cent of metallic iron. The ore from this vein can be run into the stock-house of the furnace by means of a tramway, and the ore is so easily mined that it is estimated that it can be placed in the stock-house at a price not exceeding 50 cents per ton. To use Prof. Brainerd's own language, "the ore will melt like butter when placed in the furnace, and it will make the highest grade of iron."

The heavy rain of last week served to throw back the work considerably on some of the industries, but everything is now going forward as usual.

The 100 coke ovens which are being constructed by the Fort Payne Coal & Iron Co. are rapidly nearing completion. If nothing unforeseen arises, these ovens will be ready to begin operations by the middle of April, and possibly sooner.

The Southern Asphalt Paving Co. has just secured the contract for the paving of White Side street in Chattanooga. This street is about a mile in length and is to be laid with asphalt paving blocks. Work on the same will be begun in a few weeks. The contract will amount to about \$100,000 or more. The company has decided to connect the Southern Fire-clay Works with a stock company, with a capital of \$200,000. This stock has been placed upon the market and is being rapidly taken.

The Bay State furnace makes the twenty-second industry located in Fort Payne since last March. A third furnace is now being talked of, and an effort will be made at an early day to raise the stock for the same.

JAMES M. VERNON.

ALLAN WATT, Macon, N. C., desires to correspond with manufacturers of crockery and dealers of kaolin.

Virginia Enterprise.

[From the Lynchburg Daily News.]

Mr. Thomas P. Grasty, of the MANUFACTURERS' RECORD, was in the city last night and talked about Virginia. "I have just come from the Northern cities," said he, "and there is such an interest being manifested in the development of the southwestern and Piedmont sections of Virginia as no Lynchburg man could be induced to believe even if backed up by a dozen affidavits.

"If I was asked once," Mr. Grasty went on to say, "I was asked a dozen times in Philadelphia such questions as these: 'What is the matter with Lynchburg? Why isn't there some money to be made there while all the adjacent region is on such a wondrous boom?'

What did I answer? I told them now was the accepted time; now was the day for investment in this town of infinite resources, before values ran skyward. I cited the case of Birmingham, where most Virginians went to invest when prices had reached the zenith. Sensible men don't invest at flood-tide. They take booms like they take time, by the forelock.

"Town-building, however," he observed, "is like any other business. It depends on management and money. Chiefly on the latter. Time was when newspapers, for instance, could start on wind and often win in the outcome. Time was when large oaks from little acorns grew, but that time is reckoned among the yesterdays. But to come back to Lynchburg.

Lynchburg is probably the greatest railroad center in Virginia, as I stated in my speech here a month ago. It is close to hundreds of millions of tons of iron ore. It is connected with the coking coal fields not only by the Chesapeake & Ohio, but by the Norfolk & Western. Nevertheless while all Southwest Virginia is booming—that is to say the new towns—Lynchburg is not making much noise in the world. There are, however, several companies at work here, and if they make known the advantages of the place in the right way, the old town will be regenerated and disengaged from the 'let well enough alone' theory that has been accepted here for half a century.

"Another excellent location in the Old Dominion is Charlottesville. [Mr. Grasty digresses to say:] Here a company is actively engaged in making known the advantages of the place. In fact, it is more than probable that Charlottesville will have a big boom before the year is half out, as it is the crossing point of the progressive Chesapeake & Ohio and the great Piedmont Air Line."

"What do you think of Roanoke?"

"Roanoke, of course, must set the pace for Virginia's progress. During the last few years it has been well advertised, and is to-day beginning to reap the fruits of its advertisements. Roanoke has some big men. For my part I would rather back a little town possessing big men than a big town with little men running it. This is as true as the old saying: 'Better an army of lambs with lions for leaders than an army of lions led by lambs.' Some day or other I am going up to Roanoke and make pen-pictures of the men who are rushing that progressive city. My friend, James S. Simmons, is, in my opinion, the foremost promoter of the prosperity of the magic city of Virginia. Whatever he takes

hold of goes. Such magnetic, wide-awake men are worth their weight in gold to a town.

Speaking of men who succeed suggests a word about Liberty, now by act of legislature changed to Bedford City. There is a phenomenal current of new, virile blood coursing through the veins of this late candidate for cityhood, and unless all signs fail such men as the Berry Brothers and the Campbell Brothers will succeed in making Bedford City a great success before the old fogies realize what is going on. It is but fair to say, however, that there are fewer old fogies in Bedford City than in any place of its size and age in all the South.

There is one thing for Lynchburg to congratulate herself upon, and that is that standing as she does at the railroad center of this section, with a multiplicity of well-established commercial houses, which are surprisingly well equipped and capable of competing with any in the South, Lynchburg will grow and prosper as the adjacent country prospers, and all the new towns will pay tribute to her merchants for many a long year to come."

"Hustling" Roanoke.

ROANOKE, VA., March 7, 1890.

Editor Manufacturers' Record.

While it is true that all of the small booming towns of Virginia have their merits, the City of Roanoke, the Magic City of the South, takes the lead in the entire State. There are strangers here daily who are amazed at the magnitude of our railroad machine shops, rolling mills, bridge works, furnaces, flouring mills, planing mills and especially the immense volume of business that is transacted in every line of trade.

There is a great demand here for private residences and for business houses. A business house of any kind cannot be rented, and if the money that is now locked up in vaults in the cities at 3 and 4 per cent. interest could be invested here in good brick business houses the investors could make a net income of 10 per cent. on their money from good reliable tenants on leases running from three to five years. Private residence property pays a still better dividend.

Speculation in improved and unimproved real estate is very active, and buyers are here from every direction. The old residents show their faith in our city and set an example to non-residents by buying largely in real estate and putting their money in any enterprise that will aid the general development of this section, that is so abundantly blessed by nature.

Our climate is pleasant, our situation healthy, our water is clear as crystal and flows from an immense spring directly out of the mountains, our people are genial and hospitable, and welcome strangers, and every inducement is offered to them to locate among us and assist us in the development of our great natural resources.

Roanoke has passed the point of being a possibility, but is a city of twenty thousand hard-working enterprising people, "hustling" from early morn till late at night in their various pursuits, and instead of being a quiet, easy-going Southern town, it has as much "git up and git" as any Western town.

We invite every one who wants to work, from the capitalist to the laborer, to come to our city and they will be pleased. I see in your columns a fine ad. from one of our best real estate agencies, and I feel satisfied that they will take pleasure in answering letters from any one wishing more information about this Magic City of Roanoke.

R. A. B.

The Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, March 11, 1890.

There is less to be said this week concerning the immediate future of the iron market than there has been since the opening of the year. The chief reason is that the majority of both the large and small buyers are still refusing to make provision for the summer. It will be remembered that late last fall most large buyers secured themselves in supplies to last until April 1st. The smaller buyers came in afterward, paying higher prices and helping to crowd the market up to the high point reached in January. Since they retired demand has appeared to slacken up, and prices have been falling according to newspaper reports. But in point of fact there has been very little drop, excepting in prices of inferior irons. To-day it is difficult to buy good No. 1 foundry under \$20, and special brands are held at least 50 cents higher. There is but little inquiry for foundry irons at present, notwithstanding the fact that consumers have very little stock either on hand or under contract. The same is largely true of forge iron. This fact of the cleaned up condition of pig iron stocks helps to strengthen makers in their belief that within 30 days a very active demand will set in. There is more probability of this than that prices will decline any farther. There is no room for a decline. All elements of cost have advanced, and have advanced for good. Forge iron is quoted as low as \$16.50 for some two or three makes, and a few brands that were held at \$17.25 a week ago can now be had at \$17, but standard brands continue to be held at \$17.50. This is, however, mostly an asking price. The claim is made by brokers representing the larger companies that the situation warrants an advance within 30 days. Buyers are not altogether satisfied with the position of things, but note should be made of the fact that they show no disposition to buy at the present drop. It is not that they expect prices to go any lower, but they prefer to wait until they have secured business enough to warrant the placing of large orders for summer delivery. The mills and furnaces throughout Pennsylvania, and, in fact, throughout the North, are all running as steadily as at any time during the past year, the only difference being that they have not now as much work on their books as they had two or three months ago. The large contracts are nearly all nearing completion, and buyers are waiting before placing their new orders to see what will turn up. Bessemer pig is quoted nominally at \$21 to \$21.50. The drop in blooms and slabs has been quite a surprise, and in consequence of the uncertain feeling in the market concerning the course of prices no large orders are being placed. The offers made this week by buyers have not been acceptable to makers. Nail slabs are very low, especially in the East, where steel nails have very little run. Steel for other purposes is in fair demand.

The bar mills are running along as usual, but a good many are near the end of their orders. The claim is made by buyers that when the work in hand is finished, they will cut prices. This belief accounts for the backwardness on the part of large bar iron buyers. Nails are quoted at \$1.95 for standard makes, up to \$2.10, according to size of order. A meeting is to be held in Philadelphia on Thursday of this week, at which steps will be taken to protect the trade against unfair or excessive competition. The reason for the very low quotations above given is that the makers of poor nails sell at this very low figure, and the makers of standard qualities cut prices in order to hold their trade.

Skelp iron is in moderate demand and

firm at 1.90 and 2.10 respectively for grooved and sheared. The wrought iron mill are all doing a big business, and making preparations for a better. The sheet iron makers are being favored with an extraordinary demand, and prices are very high and strong. Plate iron has been shaded a little during the past week, but only to large buyers; small buyers are paying old figures. No shadings in structural iron have occurred and none are likely, as it has been learned that the railroad men are about to place very large orders for bridge material. Builders are also making contracts for a good many little lots, ranging from 50 to 100 or 200 tons each.

Steel rails are quoted at \$35 to \$36. The past week's business has been made up of small lots exclusively. Old rails are more abundant than they have been for twelve months, and are lower. A good many railroad managers have found it to their advantage to make an exchange or to turn old rails into cash.

Advices from the Ohio Valley do not indicate any general improvement, but supplies of iron are very little in excess of demand. All the mills are busy.

Southern iron makers are content to maintain stiff quotations, as they have a great deal of iron booked for summer delivery. Chicago and St. Louis markets are reported fairly active, especially in sheet iron, barb-wire, and general hardware.

HARDWARE.

Since our last issue there is no change in prices or state of trade. Orders are still small and generally for present demands only. Should the present dullness in trade continue, a weakening in price may be expected, owing to accumulation in stock at the factories. Some factories are soliciting orders with more eagerness, and in some cases indicate a tendency to cut prices for large orders for immediate order. The shovel makers are very firm, and do not care for orders at the very low prices that have been prevailing.

Capitalists and small investors read "War" Robertson's advertisement in this paper.

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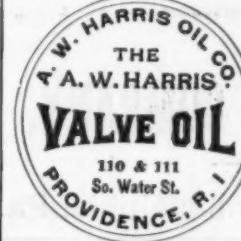
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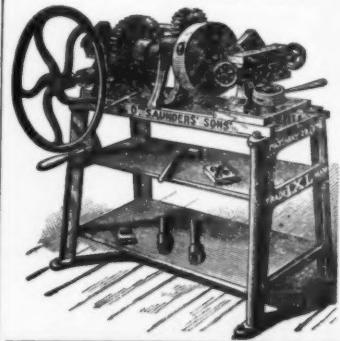
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Eastern Lumber Markets.

(Spec. correspondence MANUFACTURERS' RECORD.)
NEW YORK, March 11, 1890.

All of our lumber dealers are watching their chances for catching some of the large lumber contracts which, to all appearances, will be placed during the coming 30 days. It is supposed, of course, that a good many of these chances are known about only in limited circles; but one man is about as smart as another, and it turns out that quite a number are after the same job, in several instances, with the result that prices named a week or two ago have, in two or three cases, been withdrawn and lower ones substituted. The effect of this will be to break prices and bring them to the narrowest margin possible, but only for large operations. The smaller demands will be filled at fully as strong prices as last year, and quite probably even stronger.

There is no doubt whatever that yellow pine will be higher, and from present appearances the hemlock men will be able to maintain the advance made last week at Williamsport. The belief in better prices is based upon, first, the restricted supply of lumber that is now prepared, owing to the unfavorable winter, and second, the greater activity in all kinds of building work. Every railroad centering here is, or soon will be, in the market for a good deal of stuff—spruce, hemlock, white pine, North Carolina pine, yellow pine, etc. These buyers will also require large lots of hard-woods, but their requirements in this direction have not yet come into view. Every one says it will be an easy matter to maintain present quotations through the year. This is a fair presumption. The wholesalers will not make more than they did last year, however, except where they do more business. Those who are handling Southern hardwoods will come in for the largest share of the improvement, whatever it may be.

Southern pine is coming into very sharp competition with white pine, as was predicted some months ago, and already some very close figuring has been done, with the result of about equally dividing the traffic between the two sections. The Southern men are not cutting prices; the Northern men are; the reason is apparent. The fact that spruce, as well as hemlock, will not be quite so plenty in this and other markets, promises to open a little wider sluice for the entrance of the product of Southern mills; this fact has already been foreseen by the enterprising managers of Southern concerns; they take a very hopeful view, and are privately counting upon an advance before the season is over, and are probably right, as stocks in the South are reported to be not large enough to bring about any sharp competition among the Southern manufacturers.

Rough boards from North Carolina are in very good demand at present; the demand for dressed stock is also excellent. It is thought that the probabilities of a combination between Southern lumber manufacturers are stronger than they have been.

Advices from all outlying points are very good. At Buffalo some large orders have been taken for poplar, oak, pine and hemlock.

Plain and quartered oak are still improving. The demand for poplar is beginning to pick up; the winter trade has been for current wants only. Large holders are giving it out that poplar prices are sure to move up, but buyers do not admit this possibility. Holders of ash are waiting and hoping for a slight advance in prices. One-inch ash is selling at \$36; clear strips, \$26; one-inch cabinet oak, \$40; quartered oak, \$50; one-inch cherry, \$80; cherry culls, \$18; clear maple, \$32; cottonwood, \$22; sycamore, \$25; gum, \$36; clear chestnut, \$34.

Whatever the future of the lumber market may be, the trade in this city are making preparations for a very active demand, but are more careful than they have ever been about making contracts to run through the summer at random prices, or to put it differently, at prices which may be fixed by the future course of the market.

AMONG the last bills passed by the late legislature of Virginia was one to incorporate the Lynchburg & Southwest Virginia Development Co. Among the incorporators were Hon. John W. Daniel, of Lynchburg; Major J. D. Patton, Charles E. Belvin, A. Monteiro, M.D., LeRoy E. Brown, N. T. Pate, of Richmond; E. L. Roberts, of Smyth county; E. S. Kendrick, of Bristol, Tenn.; W. C. Craig, of Augusta county, Va.; J. F. Slaughter, J. H. Bartlett, T. D. Evans, O. B. Barker, C. R. Moorman, W. H. Wren, of Lynchburg. The company is empowered to engage in any agricultural, mining, commercial, trading, manufacturing or other business; to work or manage mineral or other properties, etc.; provided that not more than 20,000 acres of land be at any one time owned in any one county of Virginia. The company may contract also to construct and maintain works of public or private improvement, tram and other roads.

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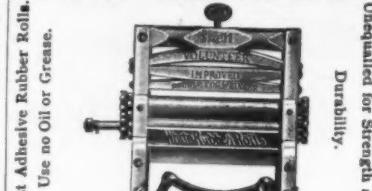
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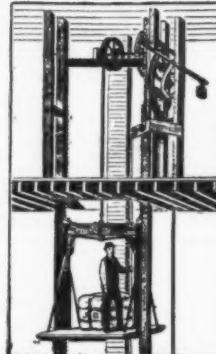
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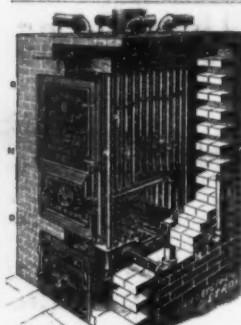
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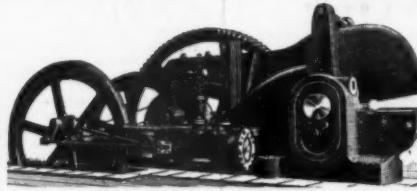
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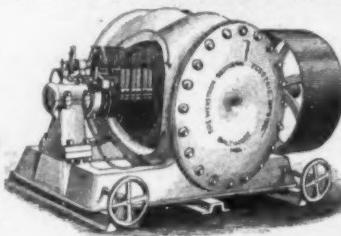
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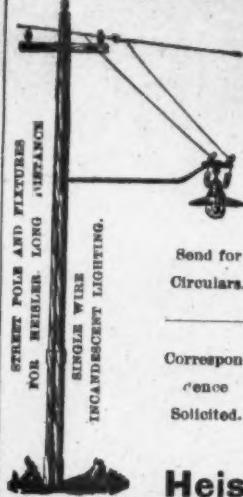
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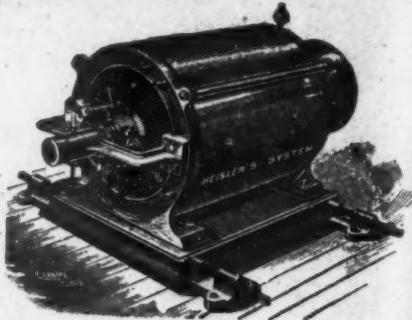
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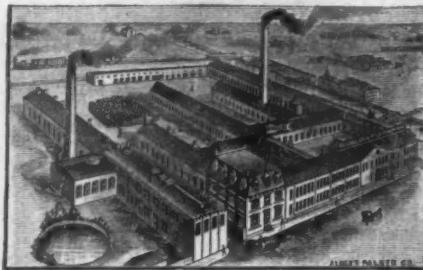
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